The War Illustrated

Vol. 1 A Permanent Picture Record of the Second Great War No. 20

A most impressive suggestion of power is afforded by these 9·2-in. howitzers lined up "somewhere in England." As a result of the strange changes that the mechanization of the Army has brought about, they are now manned by Yeomanry. Their great weight makes it impossible to move them as a whole, so for transport they can be divided into three parts, the barrel, the bed and breech, and the recoil apparatus.

Photo, Fox

Europe's Map Saw Many Changes in 1939

So swift-moving is the march of events that we sometimes tend to forget the changes which have been wrought in the course of but a few weeks and months. In this chapter the contributions made by 1939 to a changed and changing Europe are reviewed.

At the beginning of 1939 the peoples of Europe were congratulating themselves on having turned a very nasty and highly dangerous corner.

Much, very much, had happened in the space of less than a year. The Anschluss of Austria with Germany had been effected, and the man who had left Austria as a poor craftsman returned to Vienna as the triumphant Fuehrer of the German race. Then, the Sudeten Germans, encouraged by the success of the Nazis in Austria, inflamed by Hitler's demagogy and financed by Hitler's gold, clamoured first for autonomy and a little later for full union with the Reich. For a few weeks in the early autumn Europe had been on the very brink of war. Only at Munich at the eleventh hour was the menace lifted, and then at the price of Czecho-Slovakia's independence and of the prestige of the democracies. At the end of the year Germany was inflamed with her easily-won victories, her ranks were swollen by the millions of Austrians and Sudeten Germans who had "returned" to a fold from which in fact they had never strayed.

On this sketch-map of Europe are indicated the principal changes that occurred in the eventful year of 1939, principally the result of the territorial ambitions of the Fuehrer of the Nazi Reich.

But Hitler had declared that after Munich he wanted no more Czechs; he had professed with his hand on his heart that he had no further territorial aims in Europe. Those in every country who both hated war and feared it were hopeful that the new year would introduce an era of peaceful accommodation amongst the great Powers. They took comfort in the thought that the nations, armed to the teeth though they were, had come to the very edge of the precipice of war, and looking down had shrunk with horror from precipitating themselves and their neighbours into the fearsome abyss. Particularly in Britain and in France the advocates of a policy of appeasement were —somewhat ruefully, be it admitted— taking credit for the even limited success of their untiring efforts.

But history was to prove once again that tigers cannot be appeased. At the very moment when the spokesmen of the democracies were extolling the fruits of "appeasement," the dictators who held in their hands the destinies of the enslaved millions of the totalitarian States were meditating further aggressions, planning still more extensive encroachments, preparing for another onslaught on those peoples whom they envied for their riches and hated because of their independence. Thus it was that in the event 1939 brought even more changes to the map of Europe than its predecessor.

The first blow fell on the rump State of Czecho-Slovakia. At six o'clock on the morning of March 15 the German troops invaded the little republic in overwhelming strength, and the same evening the Fuehrer drove into Prague as a conqueror. Henceforth, so ran his fiat, the republic of Czecho-Slovakia ceased to exist. Bohemia and Moravia were taken under the aegis of the Reich as a protectorate, and a little later Slovakia was confirmed in a similarly puppet status.

Hitler Shocks the World

Europe shivered at the stroke; the whole democratic world was aghast at this latest demonstration of the Fuehrer's innate mendacity, his irrepressible propensity for double-dealing. But Hitler cared for none of these things. Looking about him on the long lines of German tanks, the endless columns of German infantry, the roaring squadrons of German 'planes, he found it easy to believe that his Rubicon had not yet come within sight, and that bluster, backed by irresistible force, was a card which, in his opinion, the democracies could never trump.

So, only a week after Prague, he told the Memellanders in person that they had returned home to the Reich, and already he was setting in motion his well-tried technique of aggression against yet another destined victim — this time Poland. But now the limelight shifted for a week or two to Mussolini, who chose Good Friday for the invasion of Albania, the little kingdom just across the Adriatic with which for years Italy had professed to be on terms of sincerest friendship. What small resistance there was, was soon overcome, and the King of Italy received from Mussolini the crown of Albania.

Poland's New Partition

Through the summer the tempo kept on rising. The question of Danzig and the Polish Corridor was ever on the front pages of the newspapers, and behind the scenes the statesmen and diplomats wrangled and wrought. At last on the first day of September the simmering cauldron boiled over, and German troops invaded Poland at a dozen points. Two days later Britain and France declared war on the German aggresssor.

A fortnight went by, and Russia, too, invaded Poland. Her stab in the back was effective. The republic's resistance was at an end. On September 29 Nazi Germany and Soviet Russia obliterated the independent State of Poland, and divided her territories between them in a fourth partition even more infamous and horrible in its aftermath of murder and oppression than its predecessors of the 18th century.

Hardly had the ink dried on this pact between wolf and jackal, when Russia proceeded to reduce the three Baltic States, Estonia, Latvia, and Lithuania, into satellites of her power. True, they still have their places on the map, but independence can be but a name when each little country contains the garrisons of another Power. Still not satisfied, Stalin reached out towards Finland and when his demands were refused, dispatched the Red Army to "liberate" the Finns from the oppression of their rulers.

But at last one of the dictators had overreached himself. The Finns were so inconsiderate as to greet the "liberators" with bullet and bomb, and at the year's end the long-blown-up bubble of Soviet efficiency seemed about to be pricked.

Here, then, 1939 took its leave and 1940 made entrance. Looking at the changes which one short year has brought to the map of Europe, who shall say what will be its appearance when another year of violent change has passed?

Once Again the Stern Vow—'They Shall Not Pass!'

These French soldiers are grouped together in front of a concrete pill box on the Western Front. They have inscribed on it words immortal in the history of the last war, "On ne passe pas"—"They shall not pass." This was the motto that inspired the heroic defenders of the fortress of Verdun, whose amazing stand against the Kaiser's hordes was one of the most glorious feats of arms in the history of the French Army.

During the last days of 1939 and the first days of 1940 a large part of the Western Front was mantled with hoar-frost and the whole countryside was turned into a fairyland suggesting anything but warfare. This French patrol is marching out through frost-bound woods to make contact with the enemy. It is the beginning of one of those incidents described in the French communiqués as "some patrol activity."

Photos, Planet News

Germany Lost That War: How Can She Win This?

In 1918 Imperial Germany reached the zenith of her conquests, and in a few brief months crashed into stupendous ruin and defeat. In 1939 Nazi Germany set out on the same trail, yet (as this article and the accompanying maps show) with a much smaller territory as a jumping-off ground.

MAPS can be eloquent things, and the two appearing in this page are indeed eloquent. They may afford some relief to those who, oppressed by a consciousness of Germany's military might and of the unthinking subservience of the German masses, fear that Hitler's Germany may be able to put up a vigorous and prolonged resistance both on the economic and military fronts.

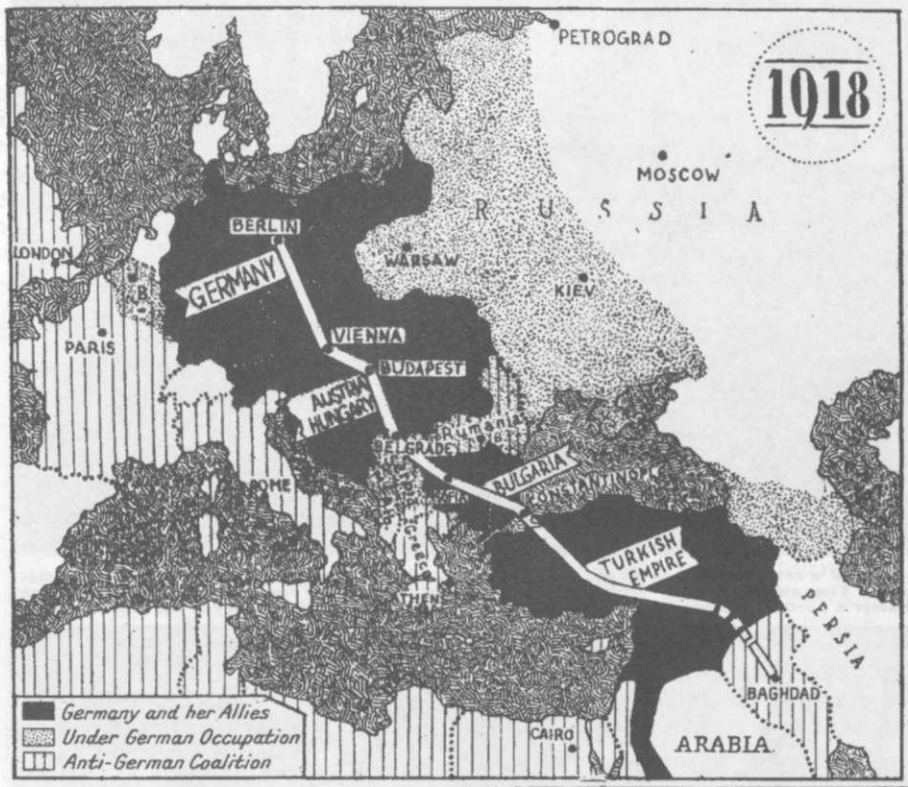
Look first at that which is labelled 1918. Across it sprawls the black shape of Germany and the German-controlled realm of the last year of the Great War. It stretched for 2,000 miles from the North Sea to the mountains of Asia Minor. Germany, Austria-Hungary, Bulgaria, and Turkey were actual allies in the war, and their troops had overrun nearly all Belgium and much of north-eastern France, Serbia, Montenegro, Rumania, White Russia, and the Baltic provinces, the Ukraine and the Caucasus. Against this mighty congeries of allied and dependent countries were ranged the Powers of Western Europe—Britain, France, and Italy, with Greece as a rather unwilling ally.

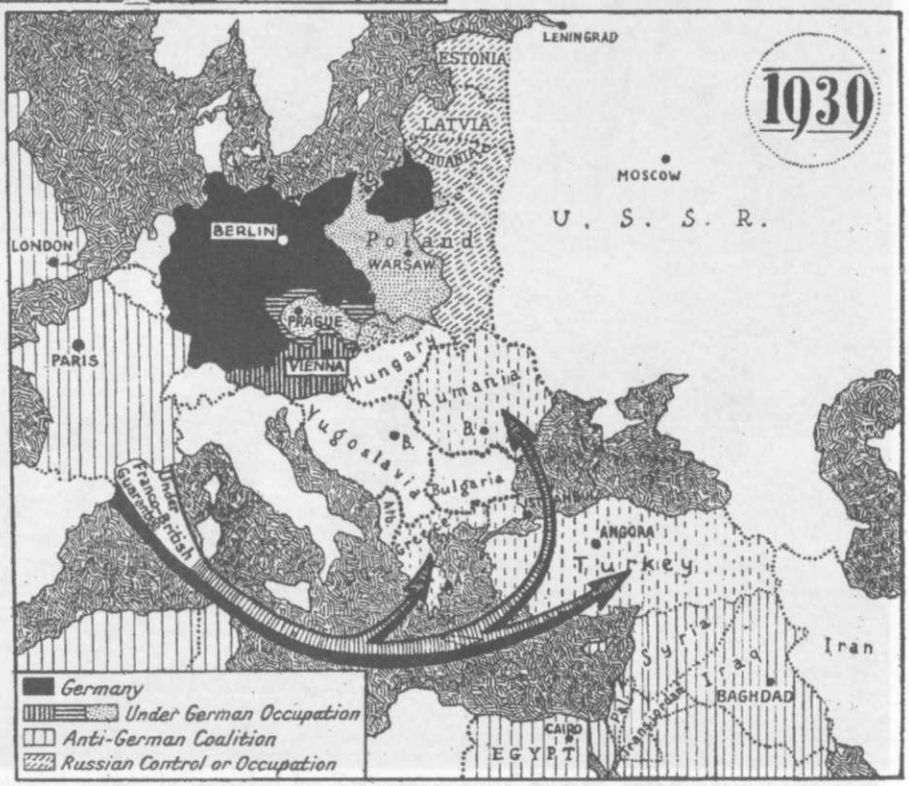
Now turn to the companion map which illustrates the ranging of the Powers at the end of 1939. As in 1918 Central Europe is either German or under German occupation, but the limits of Hitler's realm are drawn much more narrowly than were those of the Kaiser.

Belgium stands outside the conflict; France's soil is inviolate; Italy boasts of her attitude of non-belligerency; Hungary, Yugoslavia, and Bulgaria are all neutral and may be expected to remain neutral as long as they are permitted to do so. Greece, Rumania, and Turkey have placed themselves under the wing of Britain and France. On the east, Soviet Russia is Nazi Germany's ally, but the alliance is economic rather than military, and up to the end of 1939, at least, Russia seemed to have had the best of the bargain. Half Poland and the three Baltic States might be held to constitute a striking justification of Stalin's foreign policy, if Finland had not to be counted in the other side of the scale.

In 1918, at the time of the conclusion of the Treaty of Brest-Litovsk between Germany and the Bolsheviks, the Germans controlled a vast area with a population of 230,000,000, of whom 83,000,000 were in the occupied territory. At the end of 1939 the Germans controlled some 110,000,000 people, of whom 42,000,000 live in the occupied territories. In 1918 Germany held the oilfields of Rumania and of Poland, the great wheat-lands of the Ukraine, the fertile plains of Hungary and Rumania, the coal mines of Belgium. In 1939 she controlled none of these sources of the vital materials of war.

Germany lost the first Great War in 1918; we may well ask ourselves whether she has any real chance of winning the second Great War in 1940.





In these two maps (by courtesy of "Free Europe") we have a comparison, in the clearest possible form, of the extent of Germany's power in 1918, when she made her last desperate bid for victory in the Great War, and in 1939, when under the Nazis she for the second time raised up against herself a ring of enemies.

Unsleeping Watch on the German Side of the Rhine

Where two huge armies face each other unceasing vigilance must be maintained, and foggy wintry weather calls for increased watchfulness. Above, a German sentry on duty in front of the Siegfried Line, where barbed wire barriers wind in and out of the concrete anti-tank defences, is peering at a village in No-man's land, nebulous in the winter mist.

Photo, Associated Press

In Finland's Snows Stalin's 'Comrades' Perish

So complete was the rout of the Russians in certain sectors of the Finnish war that it was suggested on every hand that the Red Army was far less formidable in equipment, if not in the native quality of its men, than had been generally supposed. For the present, at least, its ill-success had deprived it of much of its prestige.

WHEN the Red Army invaded Finland on the last day of November, 1939, all the world except the Finns themselves believed that the "Russian steam-roller" would have little difficulty in swiftly crushing the Finnish resistance.

But the days and weeks went by, and at the opening of the New Year it was Finland's gallant little army which had won all the laurels of the war. In a number of engagements they had worsted the invaders and at not one point of the whole 750-mile front could the Russians claim to have made any real progress. Indeed, such gains as they had been able to make in the early days of the war were almost entirely wiped out by the counter-offensive, and in some places the Finnish ski patrols were operating well behind the enemy lines in Russian territory.

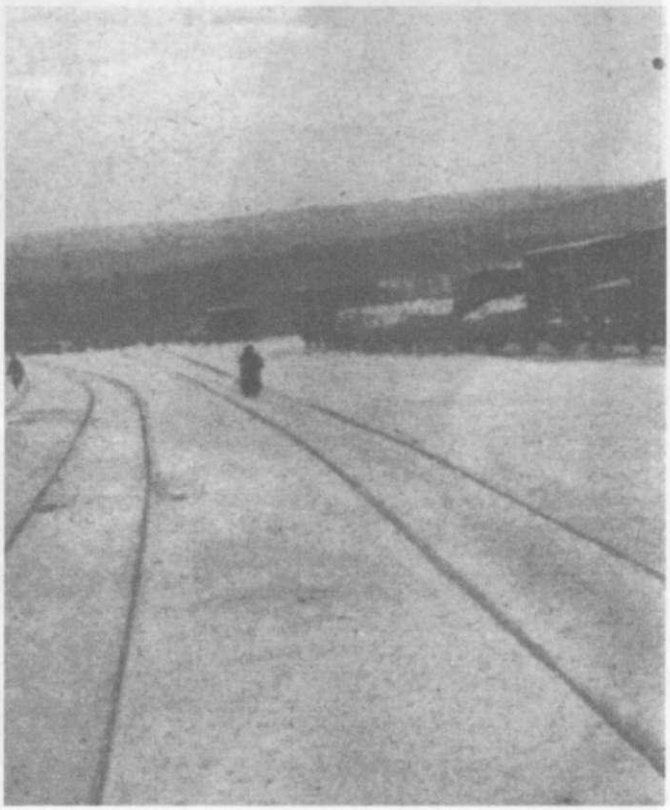
This Finn, whose house at Borgaa has been wrecked by Soviet bombers, despondently obeys a well-known Biblical injunction.

Russia's Huge Losses

In a campaign of five weeks eight divisions of the Red Army were held at bay on the Karelian Isthmus, and seven more divisions were thrown back on the central and northern fronts. Moscow was reported to have sent to the front more than 300,000 men, and it was estimated that their losses in dead and wounded certainly exceeded 100,000 men. Many more were taken prisoner. (Some of these were in a terrible state of nerves, for the poor fellows had been told by their political commissars that if captured by the Finns they would be flayed alive!) On the other hand, the Finnish casualties, despite the immense disparity of numbers, were very small.

A very large proportion of the casualties on both sides were caused by the intense cold. "I have felt extreme cold in many parts of the world," writes Mr. Hamilton Fyfe, the veteran war correspondent. "but never did I feel it more than in Finland. Thirty below is harder to bear there than elsewhere because there are so many lakes and marshes. Forty below is hell." So severe was the weather that some even of the Finnish ski patrols, men who were well equipped for the rigours of the Arctic winter, and who were hardened by a lifetime spent in the far north, fell victims to its effects.

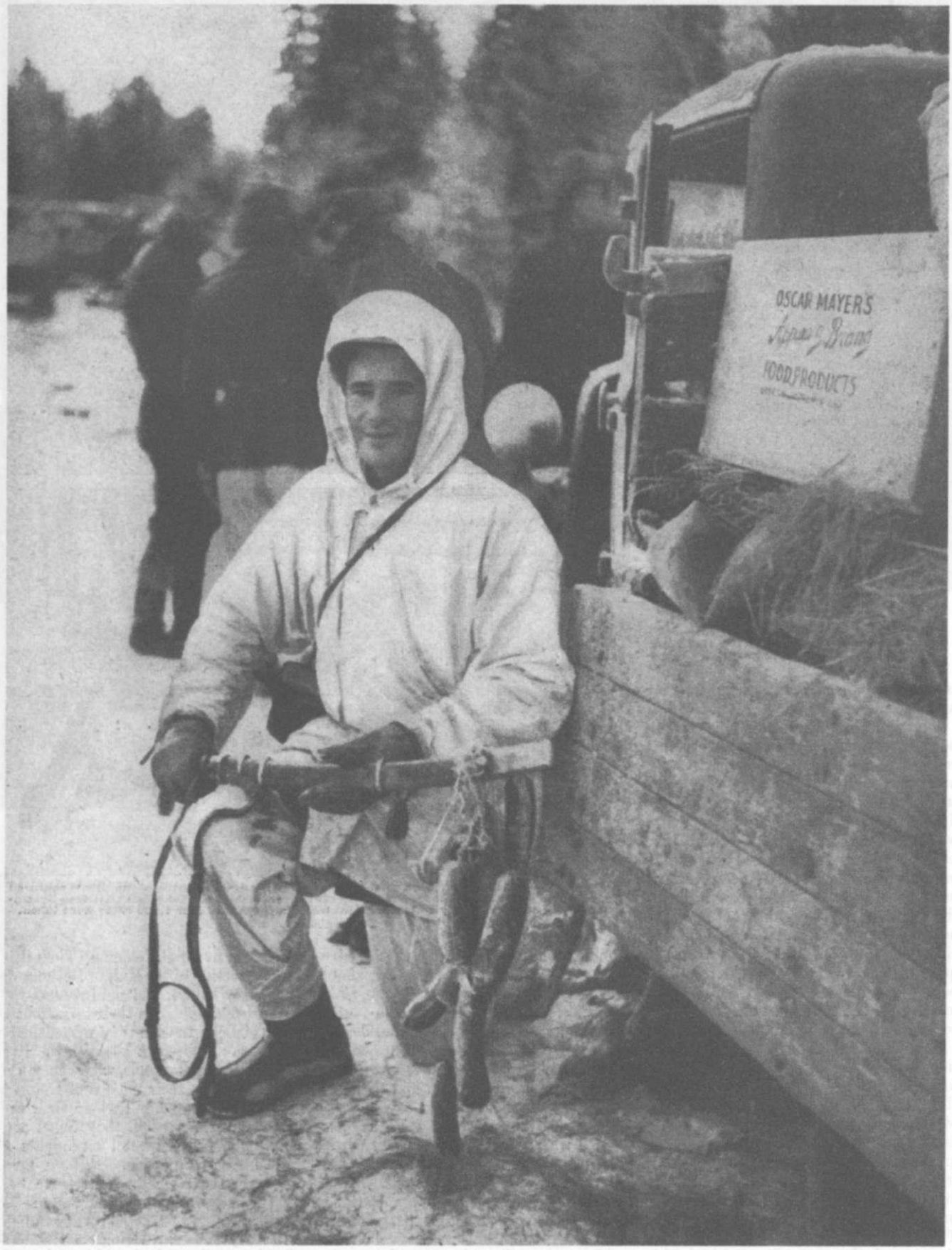
A vivid picture of the awful conditions in which the rival armies conducted their operations was given by a Special Correspondent of the "Daily Telegraph," who early in January visited the forest which constitutes the battlefield of Lake Tolva, where between Dec. 13 and Dec. 23 the Finns almost annihilated a division of Russian shock troops. Driving along the road that leads from Tolva to Agla he saw the shattered tanks, broken supply lorries, and heaped debris left behind by the Soviet division in its flight. All along the roadway he noticed strange shapes bulging beneath the snow among the trees. Sometimes the shapes might have been logs. Sometimes they looked like



The intense cold of the winter months in Finland had an important bearing on the Russo-Finnish war, for many of the ill-clad Soviet soldiers perished in the snow. Above left, Finnish soldiers are investigating weather conditions by sending up a weather balloon. The Finnish troops made several successful raids upon the Murmansk railway, the main line of transport between Leningrad and the Arctic Ocean. Above is the railway at Kandalaksha, Russia's base on the White Sea.

Photos, Associated Press, Central Press and A. B. Howse

Hungry Reds Leave Even Their Food Behind

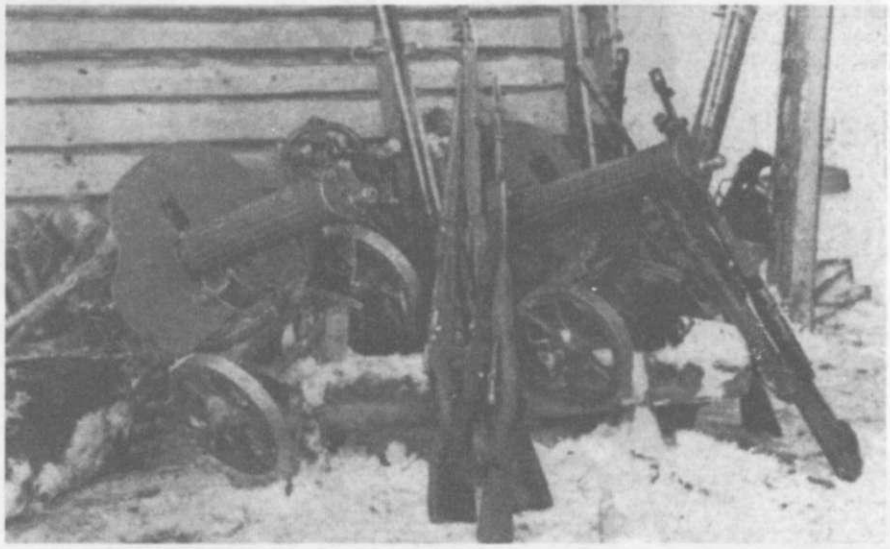


In this photograph of part of the great Russian convoy captured in a forest at Salla (seen also in page 605), a Finnish soldier is happily contemplating a string of sausages hanging from a captured Russian sword. The loss of the convoy—which included, as will be observed, foodstuffs received from overseas—must have been a serious blow to the Russians, whose lines of communication are precarious in the extreme.

Photo, Planet News

Spoils of War Add to Finland's Armaments

This young Finnish soldier takes a justifiable pleasure in turning a rifle (with fine telescopic sights), one of thousands captured from the Red Army, against the invaders of his beloved country.



These rifles and machine-guns on wheels were among the great quantity of munitions captured from the Red Army by the Finns. During the rout of the Russians at Lake Tolva between December 13 and 23 alone nearly a hundred light machine-guns and over 1,500 rifles were taken.

Photos, Central Press

crooked limbs cast into the discard by the woodsman's axe.

"Sometimes," he wrote, "heavy felt boots, bared of snow by the stumbling contact of some passing Finnish soldier, protruded suddenly and revealed the truth. Sometimes, too, we saw soldiers dragging frozen shapes like pieces of cord wood from the forest—and here and there bodies lay in crude, contorted heaps waiting for a common grave. But for the most part the snow had cloaked these forms in the immaculate anonymity of the far northern winter. Nature had done her charitable best. But it still did not seem quite possible that these had been human beings only a few days ago, or that the mask of the snow around Lake Tolva concealed more and more hundreds of dead."

Then he climbed on to the crest of a ridge and followed his guide into the forest on the left. "There are many of them here," he was told, "they were all wiped out by our machine-gun fire. . . . Suddenly we found ourselves among whole groups of white-covered figures. Some lay straight on the ground, but mostly the arms were drawn convulsively upward or projected stiffly above the shoulder. Their legs were bent or doubled. Sometimes one body, curiously oversized with its two-inch coating of snow, lay grotesquely like a cross against the surrounding white. These were the Russian dead. All carried gas masks. All about us lay featureless human shapes, their masks of snow making them more anonymous than death itself. Beside one of these I paused. Slowly I brushed the snow away. An unshaven face with an alabaster forehead emerged and then the stubble of close-cut black hair."

On every hand men in steel helmets painted with a slender red star lay where they had fallen. From pockets protruded letters, newspaper clippings, and membership cards of Bolshevik organizations, and in the snow were pitiful little packets of letters from home. . . .

After a month and more of war the Soviet troops had consolidated their advance in one sector only—in the far and frozen north at Petsamo. Their drive in the direction of the Gulf of Bothnia was completely halted, and the invaders were driven back almost to their own frontier. North of Lake Ladoga they were defeated as we have seen, with heavy loss. Even on the Karelian Isthmus, where they were able to employ their masses of troops to the best advantage and where their base was within easy reach, they failed completely in their repeated onslaughts on the Mannerheim Line. From many points on the far-flung front there were reports of the Russians digging in—the trenches had to be blasted by dynamite—as if they were intending to rest their offensive until spring should have brought with it melting of the snows and the thawing of the frozen ground.

The Hardy Finns Don't Mind the Arctic Weather

These Finnish soldiers are sleeping in a shelter behind the lines in a battlefield where the temperature is often below zero. They are huddled together for warmth, but obviously they are well clad and well shod.

In the photograph centre left a Finnish soldier is holding up, for the benefit of the photographer, a pair of Russian military trousers carefully camouflaged. The boots below them are wholly unsuitable for winter warfare. Above, Finnish soldiers have just had a boiling hot bath and are cooling themselves by dressing amidst the snow. This sort of bath, known as "Tauna," is usual among the hardy Finns.

Photos, Planet News & Press Topics

Stalin's Grip on the Baltic is Tightened

Although the subject of Soviet Russia's subjection of the three little Baltic republics has been dealt with in earlier chapters (*see* pages 170 and 233), this summary of what has been effected by the various agreements may prove helpful to an understanding of the Hitler-Stalin Axis in the New Year.

"IT must make Hitler sick to see what is happening to the Russian army in Finland," declares the "New York World-Telegram"; "he gave Russia half Poland and control of the Baltic—prizes which she was too weak to win for herself." Whether we agree or not with the American newspaper's almost contemptuous view of the Red Army, there can be no two opinions about Russia's dominant position in the Baltic.

Within a fortnight from the end of September, 1939 the three Baltic States were induced or compelled to sign treaties of mutual assistance with the U.S.S.R. Estonia was the first to be tackled, and on September 28 her Foreign Minister, M. Karel Selter, and Molotov, Russia's Foreign Commissar, signed an agreement under which Soviet Russia was granted military, naval, and air bases on the islands of Dagö and Ösel, and at the port of Paldiski (Baltiski), and also two inland air bases at Kechtna and Kuzika. Shortly afterwards Russia was granted the right to maintain three garrisons on the Estonian coast opposite Dagö and Ösel.

A week later M. Munters, Latvia's Foreign Minister, put his signature to a pact by which the Soviet Union was entitled to establish naval bases at Libau (Liepaja) and Windau (Ventspils), artillery bases on the coast between Windau and Petragge (Pitrags), and several airfields at places inland.

Then, on October 10, M. Urbsys, Lithuania's Foreign Minister, agreed that Wilno air-field should become a base for the Soviet air force, and four Russian garrisons should be stationed on Lithuanian territory. In return for these concessions Wilno, Lithuania's ancient capital, which for twenty years had been in Polish hands, and the surrounding district were transferred to Lithuania.

Pacts of Mutual Assistance

All three treaties contained an identical clause stating that the contracting parties would render each other every assistance, including military assistance, in the event of aggression or the menace of aggression against one or the other, as well as in the event of aggression or the menace of aggression against the Soviet Union by any European power over the territory of any of the three Baltic States. Furthermore, the Soviet Union expressed its willingness to render assistance in armaments to its new satellites, and the contracting parties undertook not to conclude any alliances or to take part in any coalitions directed against one or the other.

When it is noted that the Estonian army numbers 10,000, the Latvian 25,000, and the Lithuanian 23,000, it will be possible to value at its true worth the clause contained in all the treaties which declares that: "the realization of this treaty should not affect in any way the sovereign rights of the contracting parties, in particular their State organization, economic and social system, military measures, and generally the principle of non-intervention in internal affairs."

Up to the present the spirit of the agreement would seem to have been kept.

From this sketch-map (taken from "Free Europe"), on which are marked the new bases secured by Soviet Russia in the Baltic States, the measure of the grip already exercised by Stalin in the Baltic will be manifest.

Now that their commerce with Britain and the West has been interrupted by the war, the Baltic States must become more and more dependent on Russia for raw materials, and recently barter agreements were entered into between them and the Soviet Union whereby the bulk of their agricultural, dairy, and leather produce is to be exchanged for Russian coal, oil, and iron-ore.

Ties of Race and Culture

Besides these economic ties there is a racial bond, in that in each of the three countries there is a considerable Russian element. It is true that in large measure the Baltic Russians are well-to-do bourgeois, and even "White" émigrés, but the revival of Russian imperialism strikes a responsive chord in their breasts. On the other hand, at the other end of the social scale there are many Balts who harbour pro-Communist sentiments.

Then, there can be no doubt that the majority of the Baltic peoples, if they had to choose between Russian and German overlords, would prefer the former. The German "Baltic Barons" had a bad reputation because of their treatment of the local Letts and Estonians, whereas under the Tsarist tyranny, brutal and cruel as it often was, quite a number of these races attained to power and influence in the State.

But although the little countries still have their place on the map of Europe and have political, social and economic systems which are widely at variance with those of Soviet Russia, it may be feared that 1939 brought to an end their brief period of independence.

If Stalin had had his way, the same year would have seen the end of Finnish independence, for in early October he made demands on Finland very similar to those which had already been granted at the pistol's point by the three Baltic States, thus making it clear that he was aiming at securing control of both sides of the Gulf of Finland. The negotiations dragged on for several weeks, until at last it would seem that Moscow's patience was exhausted. A frontier incident happened in suspiciously convenient fashion, and on November 30 the advance guard of the Red Army crossed the frontier in what Moscow obviously expected would be a mere "walk-over." But the commissars of the Kremlin had not allowed for the independent spirit and natural valour of the Finnish people—nor for the rigours of an Arctic winter.

Thus it came about that when his programme of expansion in the Baltic was almost complete, Stalin was nonplussed by Finland's heroic stand.

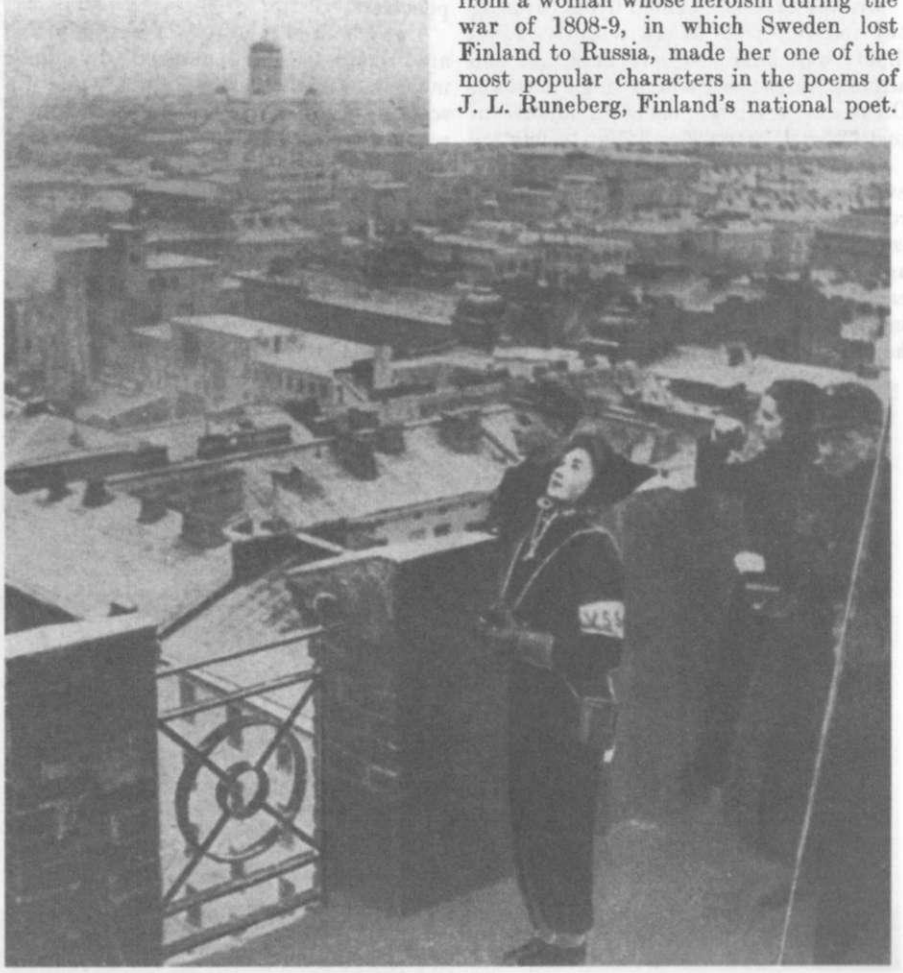
Women Work and Die for Finland

Finland has made a wonderful effort to meet the needs of the wounded. Above, nurses are at work in a hospital train made up of ordinary coaches in which beds have been placed.

Miss Fanni Luukkonen has been at the head of the Lotta Svard for ten years, and in that time its membership has grown from 50,000 to its present strength of over 100,000.

LOTTA SVARD, the Finnish women's national service organization, has over 100,000 members who undertake every sort of non-combatant duty in support of the army. Service is voluntary and unpaid, while the women even provide their own uniforms. The name is derived from a woman whose heroism during the war of 1808-9, in which Sweden lost Finland to Russia, made her one of the most popular characters in the poems of J. L. Runeberg, Finland's national poet.

Excellent work has been done by the Lotta Svard in helping those rendered homeless by the Red air raids. Above, voluntary workers are distributing soup to the victims.



First members of the Lotta Svard to be killed in action were three women employed as look-outs, who were shot dead at their posts by Soviet machine-gunners. "In the name of the Army," said Marshal Mannerheim, "I pay tribute to their memory, and at the same time I thank members of the Lotta organization for their faith, courage and devotion to duty." Above right, women observers on a Helsinki roof; left, the wife of a Helsinki doctor setting out as a Fire Guard.

Photos, Associated Press, Planet News, and Lubinski

Come Aboard One of Our Aircraft Carriers!

Written by Capt. H. C. Biard, the famous test pilot and winner in 1922 of the Schneider Trophy air race, this article gives much hitherto unpublished information concerning those great floating aerodromes, our aircraft carriers, of which, thanks partly to Nazi mendacity, the "Ark Royal" is the most famous.

ONE of the puzzles of the earlier part of this war concerned the British aircraft carrier "Ark Royal." The Germans claimed to have sunk her; we denied the claim. Come aboard her with me, and I will show you round the ship which the enemy claim is now in Davy Jones's Locker.

The latest type of aircraft carrier has a flying deck 65,000 square feet in area. This protects about seventy modern naval aeroplanes that shelter in hangars beneath.

On the deck is a landing-space of about two acres. It is fitted with wires, hooks, springs and other apparatus to grab aircraft as they land and bring them to a standstill. Some 130-feet width is none too much for putting down a fast and powerful machine whose wingspan may exceed 50 feet. A big white line is marked on which descending machines should land; but gusts of smoke and pockets of hot air from the funnels, as well as the movements of the ship itself, make the task one for a skilled pilot.

Britain has those skilled flyers. During two months' tests at sea recently, 1,500 flights and landings were made on one aircraft carrier without a single mishap. On one occasion 10 machines landed in just under 11 minutes, all quite safely.

Our latest carriers are so steady that even in a Bay of Biscay gale the angle of roll does not exceed 5 degrees from the horizontal. Elaborate precautions are taken against fire. Two great steel fire-curtains, each about 70 feet wide, can be dropped in a few seconds to subdivide each of the hangars where the machines are housed, thus localizing any fire outbreak. Four smaller fire-curtains, half the width of the others, can be dropped round the open wells of lifts, to stop flames going up or down. About 600 automatic sprinklers are fitted in vital parts of the vessel. The four pumps operating them have a delivery of 150 tons a minute. Scores of chemical fire extinguishers are placed ready to hand round the hangar walls, and every man aboard is trained and practised in fire drill.

Electrical equipment aboard includes 620 motors, 240 miles of cable, and 3,500 lamps. About 65 per cent of the hull of the ship is welded, with a saving of weight, through the absence of rivets, of about 500 tons.

Isolated from the Battle's Noise

There is a "silence room" aboard, where officers of the watch can receive orders from the bridge; it is enclosed by sound-insulated walls through which the roar of bombs, the rattle of quick-firers and the boom of great naval guns cannot penetrate.

Down in the bowels of the ship there are repair sheds manned by skilled mechanics who can carry out work of all sorts on the dive-bombers, deck-fighters, reconnaissance machines and other types now used for naval flying.

The funnels, superstructure and controls of an aircraft carrier are all jammed over to one side, out of the pilot's way.

And, believe me, some of these carriers have very good teeth of their own! Slim, long-muzzled anti-aircraft guns, heavy machine-guns with long range and terrific delivery of high-explosive bullets, and lighter machine-guns stick up in blobs and groups like asparagus sticks at a flower show.

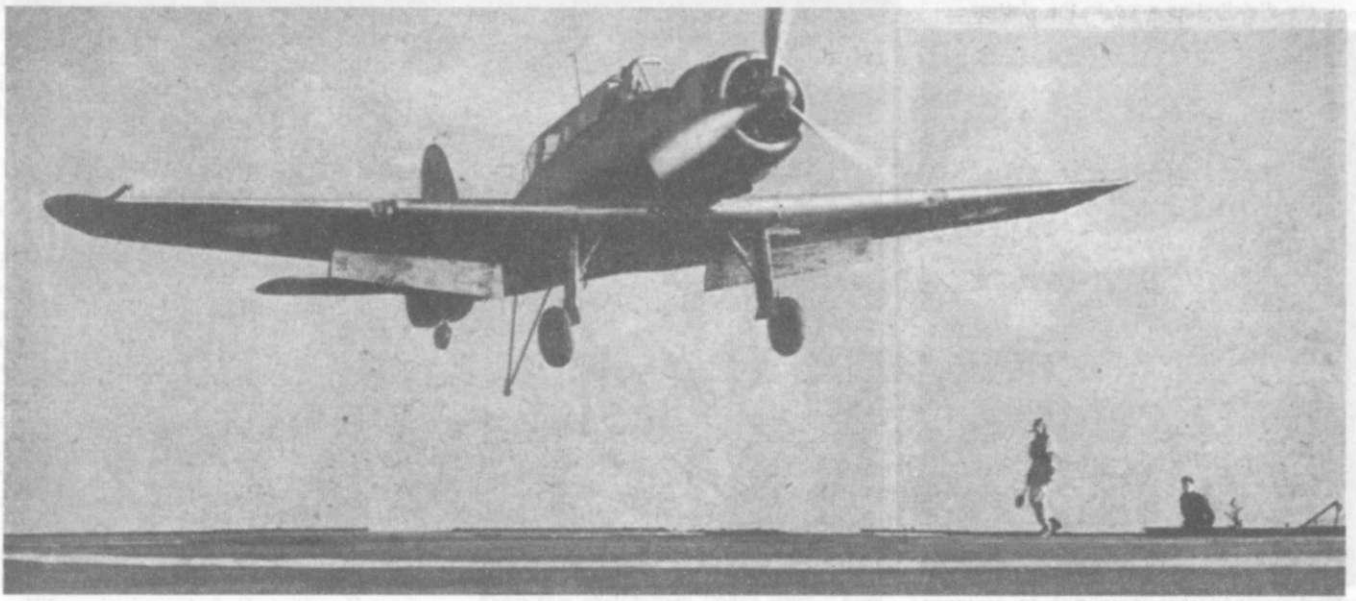
Moreover, the mother-ship would be guarded by 350 m.p.h. fighters that would zoom up into the skies about her on the first hint of danger, like angry wasps when someone has thrown a stone into the nest. Blackburn Skuas, Blackburn Rocs, Fairey Swordfishes, Fairey Seafoxes, Avro Ansons, Hawker Nimrods, and all sorts of other deadly types will be seen in the air when the first guns thunder out the overture to the next great naval battle. They will be joined by enormous Short Sunderlands, torpedo carriers, dive-bombers, and all sorts of other types, many of them operating from land bases.

Each side will try, first, to destroy the enemy aircraft carriers. They cost £3,000,000 to build, and a single bomb, with a lucky hit, might disable one—the bomb would cost perhaps £150.

Once the wasps' nests of a fleet were destroyed, the wasps would be rendered largely powerless, after their first attack, and one of the factors of naval battle now most feared by all experts would be removed.

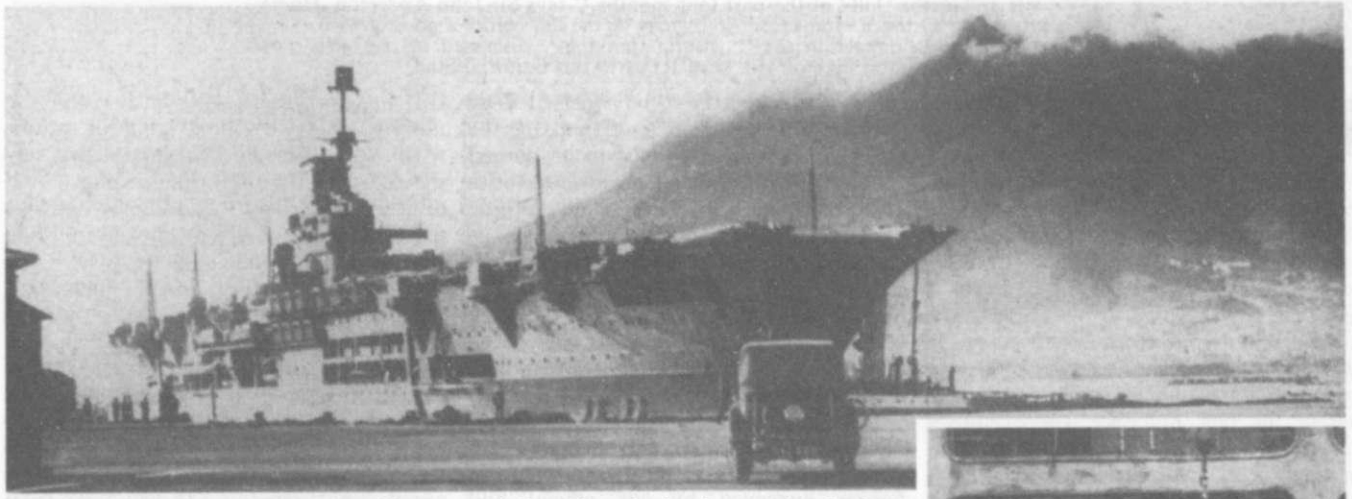
As the German Fleet prefers to sail about its own harbours, our aircraft carriers are doing splendid work helping to guard trade routes and act as bases for the hundreds of aircraft that patrol the skies searching for submarines and mines.

Many a thousand tons of food for Britain has been saved because these wasps' nests of the Fleet never relax from their everlasting humming activity.



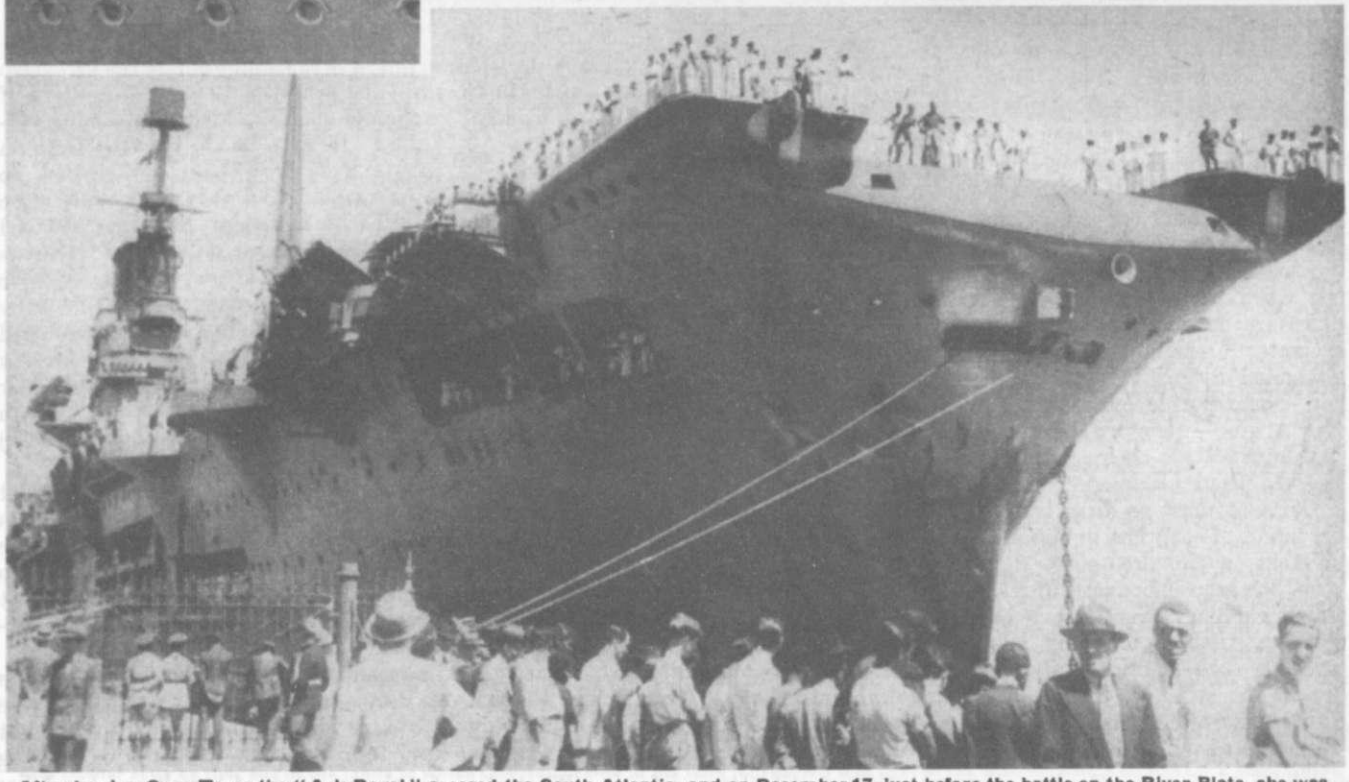
Landing on and taking off from the deck of one of the Navy's aircraft carriers is never an easy matter for any pilot. With the introduction into the Fleet Air Arm of high-performance monoplanes like the Blackburn "Skua" fleet-fighter dive-bomber, seen in the above photograph, a new technique had to be studied. With wheels and landing flaps lowered, the pilot makes his approach. In a few seconds the arrester gear will engage with the wires stretched across the deck, and the "Skua" will be brought to a halt. *Photo, Fox*

Where is the Ark Royal?—Why, Here She Is!



The "Ark Royal" is here seen alongside a quay at Cape Town during her recent cruise in the South Atlantic. At the outbreak of war she was the largest aircraft carrier in any fleet. She was also the only ship in the Navy specially built for this purpose.

NOTHING has done more to expose the stupidity of Nazi propaganda than the persistence in the absurd lie that the "Ark Royal" had been sunk. During her cruise to the South Atlantic the great aircraft carrier was sighted by a number of neutral ships, many of whom were close enough to read her name with binoculars. The first suggestion that she might be bound for South American waters appeared in a New York paper which stated that an American ship had sighted in mid-ocean small aircraft that could have come only from a carrier.



After leaving Cape Town the "Ark Royal" crossed the South Atlantic, and on December 17, just before the battle on the River Plate, she was at Rio de Janeiro refuelling. Above we see her moored in that port, and the remarkable construction of her hull is clearly visible. There could be no mistaking her identity as her name-plate, in the photograph left centre, shows. In the photograph right she is taking oil on board.

Photos, Associated Press

We Shan't Win the War by 'Wishful Thinking'!

"What is called the 'lull' of the past four months," says Sir John Anderson, Home Secretary and Minister of Home Security, "may be the lull before a great storm . . ." So he, too, finds a danger in that "wishful thinking," discussed in this article by E. Royston Pike of THE WAR ILLUSTRATED Editorial Staff.

FIVE months of war, and not a single British civilian killed by an enemy bomb! Five months of war, and only a handful of British soldiers killed on the Western Front! Five months of war in which the German fleet has not once dared to come out in strength—such strength as it has—to meet the Royal Navy!

Such remarks as these are to be heard every day over the breakfast-table and in the smoking-room at the club, on the top of the bus, and over the evening's hand of bridge. They are cheering; and in these weeks of natural and artificial black-out, who can blame us for seeking cheer where we may find it?

Although Britain has not yet been subjected to an aerial "Blitzkrieg," the North Sea has been crossed many times by enemy raiders. This German photo claims to show a Nazi 'plane on its way to the Scottish coast over German minesweepers in the North Sea. *"Berliner Illustrierter Zeitung"*

Sometimes, too, our spirits are uplifted by what we hear of happenings, or supposed happenings, in Germany. We smile when we hear that the poor old Fritzes are getting rheumatism because the water seeps through the badly-constructed Siegfried Line. We smile again—some people even permit themselves a gibe—when we hear that the "hausfrauen" are being told how to make tea from blackberry leaves, that the Germans must go dirty because one 3-oz. tablet of soap has to last a month, and that a hundred-point rationing system has been introduced in respect of German clothing. Surely it is obvious, we argue, that if rationing has been carried to such lengths in Germany so early in the struggle, the front of our enemies must already be cracking!

Rumours of political changes are also singularly comforting. Hardly a day goes by but we hear that Hitler has lost all interest in the war, or is dying of cancer, or that he is shortly to be superseded by Goering and the generals, or that Goering and the generals are about to be purged by the Fuehrer. Then there are stories about German warplanes being nothing like so numerous nor so dangerous as we had been led to believe. The German soldier, too, is not to be compared with his father, for not only does he lack training, but his stamina has been undermined by the hard years which have been Germany's since Versailles.

Indulging in such thoughts as these, opening our ears to the flood-tide of cheerful rumour, noting the facts and figures purveyed by our official and unofficial propagandists, we may well feel that the title of the Ministry of Information's most recently published booklet is thoroughly well chosen. "Assurance of Victory"—that indeed is ours!

But if we turn to the other side of the picture we may have to admit that some at least of our ardent hopes and fondest expectations of an easy victory—a victory which will be won not by hard fighting, but by the collapse into chaos of the German social and economic system or by a revolution which will sweep Hitler from the stage and put in his stead a government of generals or of monarchists—are just so much "wishful thinking."

Perhaps the most foolish of these expectations is that a sure and permanent peace would inevitably come to Europe and the world if Hitler were to fall from power. Charming as they appear in retrospect, the petty German principalities of a century and more ago were really rendered an anachronism by the thunder of Napoleon's guns; and if we think of a monarchist Germany let us not forget that it is on the shoulders of the last of the Kaisers that history has placed the responsibility for plunging the world into the first Great War. As for a government of generals, that could only mean a government dreaming of military victory and planning for it. What else, indeed, can the members of a military caste be expected to dream of and plan? On the morrow of Hitler's downfall the military camarilla might indeed profess with their hands on their hearts that they wanted nothing more than a long period of peace, but it is surely obvious that that period of peace would be but an interlude between this struggle and one greater far.

Nor can the realist derive much comfort from the fact that up to the present the German air force has had such little success in its raids upon Britain's shores. In Poland the story was very different, and it is surely not unreasonable to suggest that the Nazi warlords have not yet seen fit to give an exhibition of the aerial "blitzkrieg." If we have been spared so far it is not because the enemy is too humane to bomb crowded cities: Poland must ever be an object lesson to the contrary. Rather it is because a few minutes after the first bomb is dropped on London or Sheffield, a hail of bombs will be descending on Germany's vital arteries in the Ruhr and the Rhineland. Not humanity but cold, hard calculation have we to thank for our immunity to date. Air raids may come—some would say must come—though perhaps they will be delayed until Hitler and his Nazis stand on the very brink of destruction. Then they will launch their aerial armadas in the resolve to take down with them into the pit all that can be smashed and destroyed of Western civilization.

Rationing a Sign of Strength?

But, it may be said, surely the extensive rationing in Germany is proof positive of economic shortage and approaching collapse? It may be so, but the German people have long been accustomed to short rations, and they have long gone to bed with hardship. Now they are told by the man whom millions of Germans still regard with an almost ecstatic worship as the saviour of their country that further hardships and a continued shortage are the price they have to pay if they would save themselves and their country from the "extinction" with which (so the Nazi propagandists allege) they are threatened by the Allies.

But more important still is the thought that Germany's rationing may be a sign not of weakness, not even of undue shortage, but of the determination to employ the available supplies to the best advantage and so to husband the resources that victory may be won.

Germany, in a word, knows that she is at war, and is ready for every sacrifice necessary for its winning. Britain is at war, too, and, like Germany, is fighting for the existence of herself and her Allies and of everything that makes life dear. But does she realize it?

Heroes of Wartime Black-out—Unseen & Unsung

Even in the best of times a London bus driver is not one to be envied, but how much more difficult is his task when he has to pilot his vehicle through a darkness thick enough to be felt!

Photo, specially taken for The War Illustrated

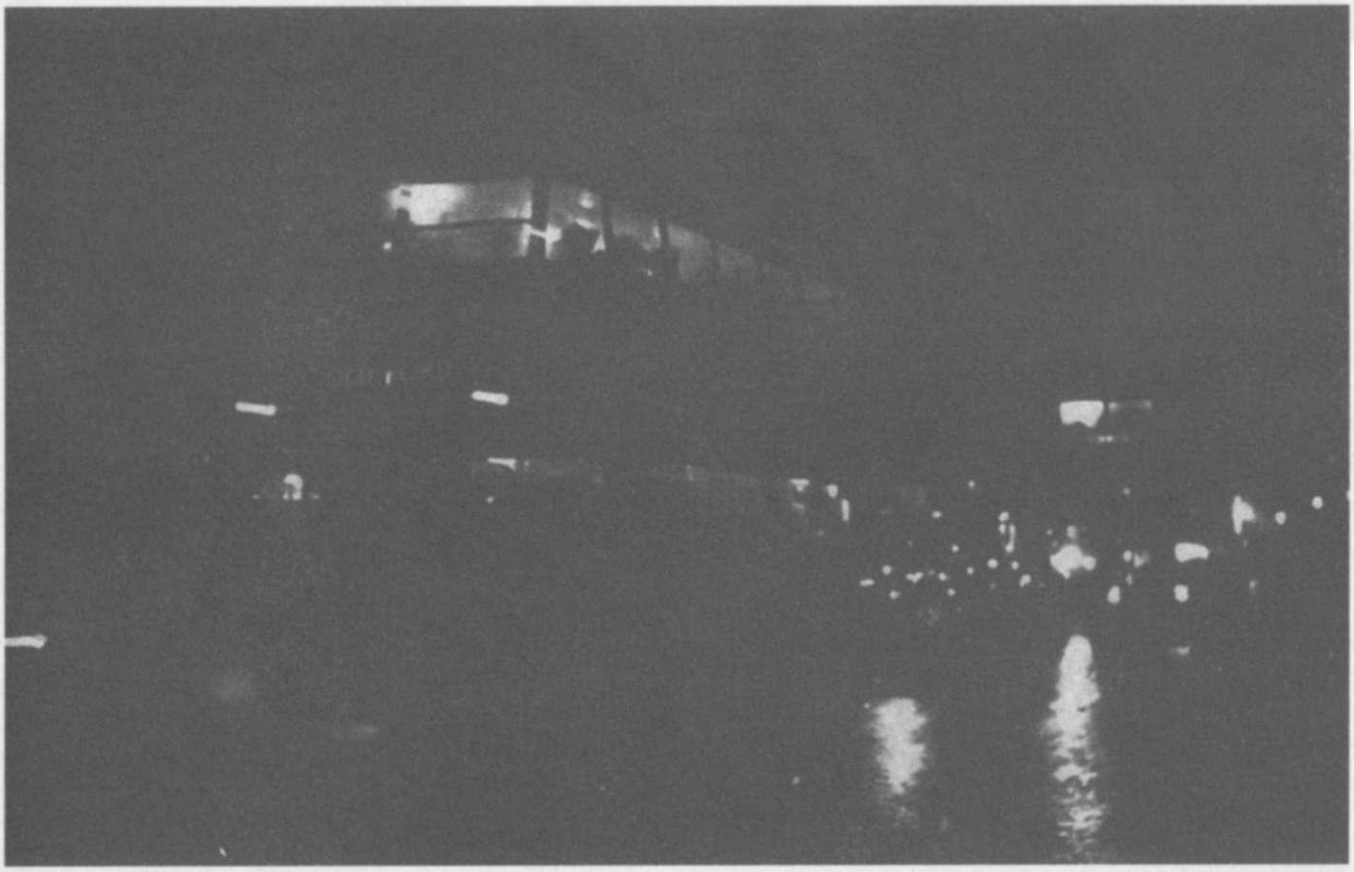
In broad terms their name is legion, not forgetting the newsvendor who still stands shivering at his wintry pitch, lustily shouting "the latest" when you can only discern him dimly by the glow of his cigarette. But chief of the unknown heroes to whom town dwellers are so indebted when the pall of blackness enfolds the city and suburbs are the bus drivers and the taxi-men; all of them. Few men would willingly become drivers of either cabs or omnibuses under the nerve-racking conditions that prevail in the many thousand miles of Metropolitan highways and byways after night falls on the unillumined thoroughfares. For even the new .00024 lights seem only to make the darkness more profound.

But War caught these essential transport toilers at their job, and in the good British spirit they—not perhaps without an excusable grumble—felt they could but "carry on." And nobly have most of them done so. To be stopped on your taxi in the Strand and asked to drive to Streatham Hill or Wimbledon in the inky night, with no more than a hooded headlight and the tiniest of twinkling signals at the cross roads, is a job to daunt even the stoutest heart. Yet the taxi drivers are rarely known to refuse even so distant a fare, except when restricted petrol supply might fail them.

Terrifying as their job may be, it is even less formidable than that of the heroes who pilot the mighty omnibuses, those veritable overland cruisers, on their long and frequent-stopping journeys from ten to twenty miles at a stretch. The success with which they are carrying on is one more evidence of the astonishing capacity of the human being quickly to adapt himself to new, strange and frightening conditions of activity.

In Paris, as in London, policemen on point duty during the black-out have been issued with white cloaks so as to make them a little more visible to those dangerous Jehus, the Paris taxi drivers.

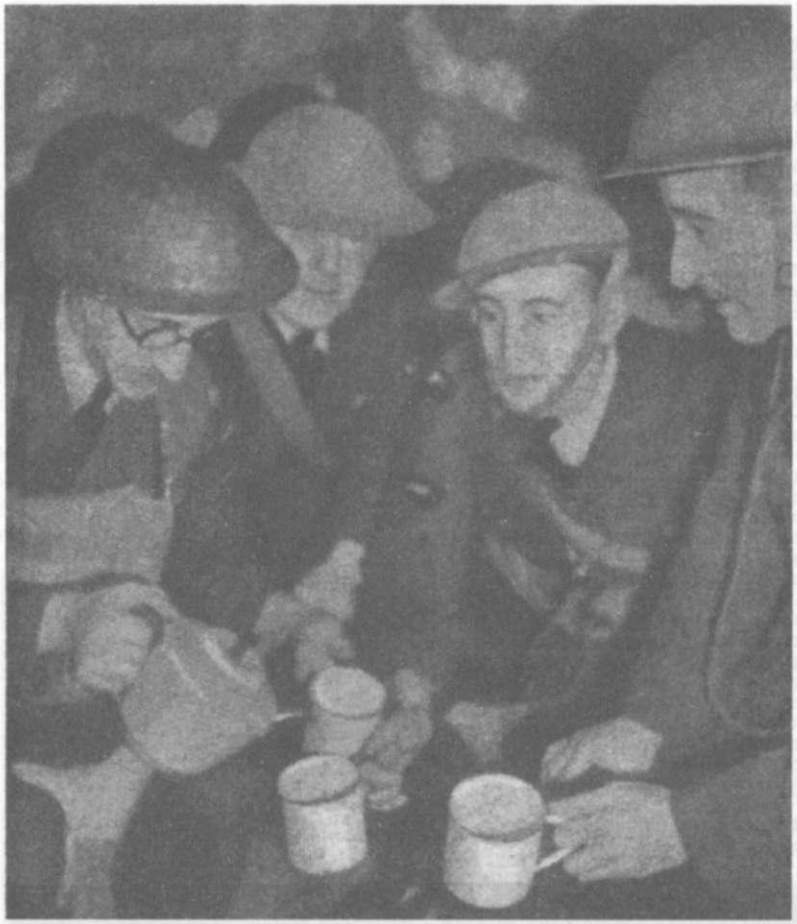
Photo, Keystone



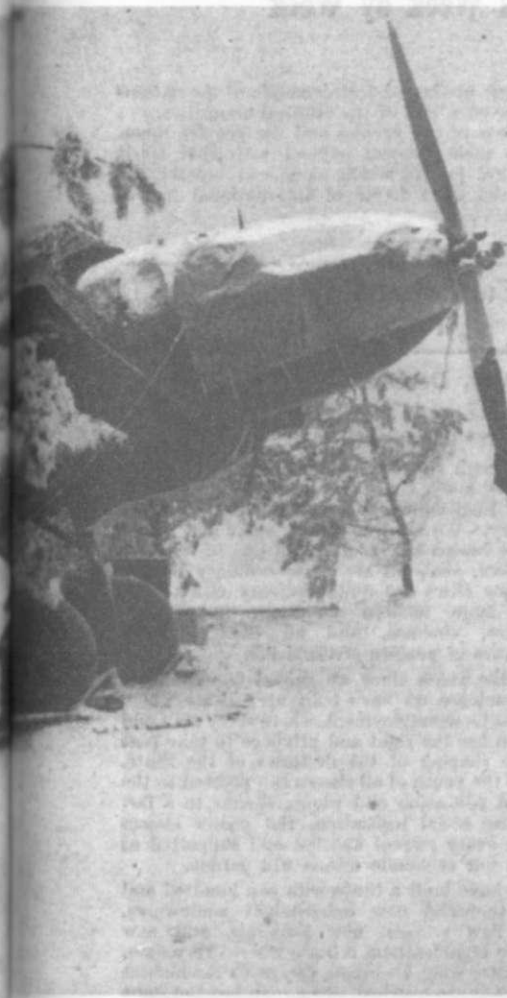
Old Homer tells us that one of the lands to which Odysseus came in his long journeying was that of the Cimmerians, who lived in a place where the sun never shone. If the fabled voyager could now come to life and take his stand in the heart of London near the plinth where Eros used to look down on the flower-sellers, he might well imagine himself back in the Cimmerian realm. A gross darkness enwraps the scene, pierced now and again by the beams of bus lamps and by the erratic flickerings of pocket torches.

Photo, specially taken for The War Illustrated

Intimate Pictures of Daily Life in the R.A.F. at a British Aero



These men in their quarters at a British aerodrome in France are upholding the belief that the English are a nation of tea-drinkers. Besides the boiling kettle, the teapot and the tin mugs being always in request, innumerable cups of tea are supplied at the many NAAFI canteens in France.



WORDS THAT HISTORY WILL REMEMBER

Extracted from Authoritative War Speeches and Statements Week by Week

(*Continued from page* 594)

Nazi Contempt for Legal Code of Sea Warfare

Wednesday, December 20, 1939

ADMIRAL LORD CHATFIELD in a broadcast :

Whatever she may say, Germany needs a short war, and so her hope is to break the British Navy's grip on her supplies and to endeavour to defeat us rapidly where we are indeed most vulnerable, yet where we are strongest—namely, on the sea.

Now that the Royal Navy has broken the back of her submarine attack Germany has started to use a new type of mine, not laid according to international law in defined places, but strewed promiscuously over the sea routes to terrify the merchant seamen of the world from approaching our shores. Her latest effort is to machine-gun and bomb our fishing-vessels and their crews employed on their ordinary daily work.

There is a third sea weapon she is using, the surface warship and the armed raider. To find a needle in a bundle of hay is an easy task compared to finding a single raider free to roam the seven seas—those vast ocean spaces in which British trade moves. It would be hard enough if you had perpetual daylight, permanently clear weather, and a vast number of warships to hunt each quarry. While we therefore are justly proud of what the Navy has done to bring honour on this country and itself, let us remember that the dispositions of our hunting forces were mainly the difficult and anxious responsibility of the Admiralty from the First Lord downwards. Naval warfare is full of disappointments, but luck is bound to turn up if it is skilfully worked for. . . .

France Branded with Britain in Equal Guilt

Friday, December 22

DR. GOEBBELS, Reich Minister of Propaganda, in a speech at a political Christmas Party :

This is a " war Christmas " celebrated by a determined people. There is hardly anybody in Germany who is not suffering from difficulties and hardships, and there is certainly nobody who does not want to suffer.

Germany's very existence is at stake. Utterances from London and Paris provide clearer and clearer evidence of this fact. If, during the first weeks of the war, the Allied politicians tried to persuade the world that they were waging a war against Hitlerism without wanting to injure the German people, nobody is trying to conceal today that it is their goal to strike Germany down, to dismember her as a nation, and to split her up, thereby bringing her back to her former political and economic impotence. Either we resign as a great Power or we win this war.

It is of little significance for our national future who in particular among our enemies wanted this war or whether the British and French peoples are waging it joyfully and willingly. The great fact is that we are waging war. It would be wrong to assume that the warmongers in Paris would be more inclined to spare us than those in London. Both of them are just as brutal and cynical in their openly proclaimed war aims. This means that the whole plutocratic world has risen against the German people and its social community and wants to smash and destroy it. . . .

We celebrate this Christmas with that profound faith which is always the prerequisite of victory. There is among us no lack of that optimism essential to living and fighting. In this hour, we are not moved by grief and mourning but by pride and confidence. Our people are united as one great family and they are determined to bear the burden of fighting and working. We promise those at the front to see that the home front does its duty.

Wherever burdens and sacrifices can be mitigated, we have done so and shall continue to do so. But wherever they are inevitable, we will bear them together in order to make them lighter. Although peace is the real meaning of Christmas, we shall talk of peace only after victory.

Great Religious Leader's Five Peace Points

Sunday, December 24

HIS HOLINESS THE POPE, in an address to the College of Cardinals :

All nations, great and small, strong and weak, have a right to life and independence. When this equality of rights has been destroyed or damaged or imperilled the juridical order calls for reparation based on justice.

The nations must be freed from the burden of armament races, and from the danger that material forces may become not the defender but the tyrannical violator of right. Peace must be founded upon disarmament. . . .

Lessons must be drawn from past experience. This applies also to the creation or reconstitution of international institutions. And, since it is difficult, if not impossible, to foresee and safeguard everything at the moment of the peace negotiations, the constitution of juridical institutions which may serve to ensure the loyal and faithful application of the agreements and, where the need is recognized, to revise and correct them, is of decisive importance for the honourable acceptance of a peace treaty and for the avoidance of arbitrary and unilateral infringements and interpretations of the terms of the treaties.

In particular, attention must be paid to the true needs and just demands of the nations and peoples, and of the ethnical minorities. . . .

Rulers of the peoples and the peoples themselves must become imbued with that spirit of moral justice which alone can breathe life into the dead letter of international instruments. . . .

Culture and Ideals of the Finnish Nation

Tuesday, December 26

MR. G. A. GRIPENBERG, Finnish Minister in London, in a broadcast :

Although the English people and the Finns are very much alike in both ideals and culture, many Englishmen know very little about my country. We are a long way away and rather off the beaten track. I should like to tell you, therefore, that we are quite ordinary people, and our cities are quite ordinary cities. We have large modern buildings, universities, theatres, cinemas, and all the wonderful amenities of modern civilized life.

In the years since we gained our complete independence we have built up a State where there is no unemployment, where every man and woman has the right and privilege to take part in the shaping of the destinies of the State, where the youth of all classes can proceed to the highest education and where, thanks to a far-reaching social legislation, the poorer classes are in every respect assisted and supported as far as our economic means will permit.

We have built a State with one hundred and fifty thousand new independent landowners, with new schools, new hospitals, and new welfare organizations, a State where every man, no matter what his origin, can reach the highest office, a State in which every man has the right to think and to speak freely, to worship as he pleases, and to follow whatever vocation or occupation he prefers. You will understand, therefore, why we are now standing and fighting to resist the Russian attempt to destroy us. All these things which we—and indeed you—love and cherish are now at stake ; our heritage from past generations, our freedom, the very lives of our women and children.

THINGS YOU MAY NOT KNOW

Knot. The word knot is a nautical measure of speed, and is so called from the knots in the log line by which a ship's speed used to be calculated. A vessel is said to travel at so many nautical miles per hour, a nautical mile being usually 6,080 feet. One must never speak of so many knots or at so many knots per hour.

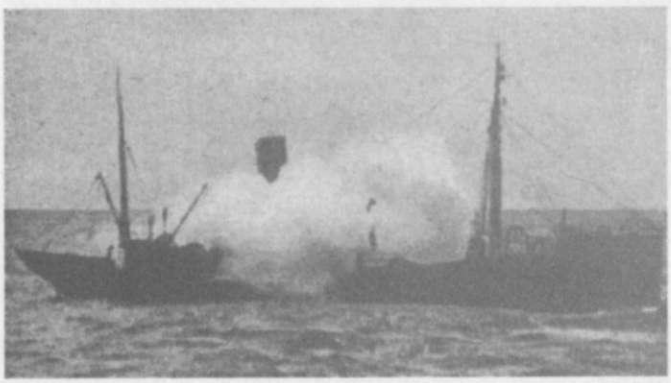
Scuttling. A ship is scuttled by letting the sea in to fill her, usually by leaving open the sea-cocks or valves and all watertight bulkheads.

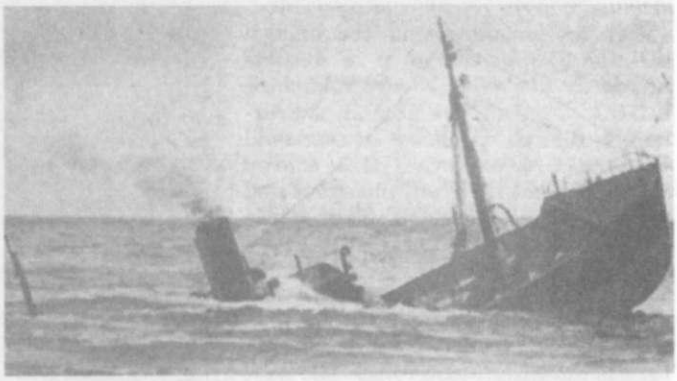
Battle-Cruiser. There is often some confusion between the terms battle-cruiser and battleship, but the difference is very simple. Battle-cruisers are in most respects the same as battleships, except that in their case some of the heavy armour belting has been sacrificed to give them greater speed. They are not smaller than battleships. The three British battle-cruisers in commission at the outbreak of war were the "Hood," " Renown " and " Repulse," the first-named of 42,000 tons with an armoured belt of 12 ins., while the other two are of 32,000 tons with a 6-in. armour belt. The " Hood " has a speed of 32 knots, and the " Renown " and " Repulse " a speed of 29 knots. The two most modern **Battleships** in commission in the Royal Navy at the outbreak of war, " Nelson " and " Rodney," are of 33,000 tons with an armour belt of 14 ins., but a speed of only 23 knots. Compare with these the **Pocket Battleship** " Deutschland," which, though only of 10,000 tons, has six 11-in. guns. Her speed is 26 knots, which would enable her to escape from all heavily-armed British ships except the three battle-cruisers.

Armed Merchant Cruisers. These are for the most part liners which have been taken over by the Royal Navy and converted into warships, e.g. the " Rawalpindi," sunk by the " Deutschland " on Nov. 23. They have a broadside armament of guns of not more than 6 ins. intended for attack as well as defence, while **Armed Merchant-Ships** carry only stern guns and anti-aircraft guns—purely defensive armament for use against submarines and aircraft.

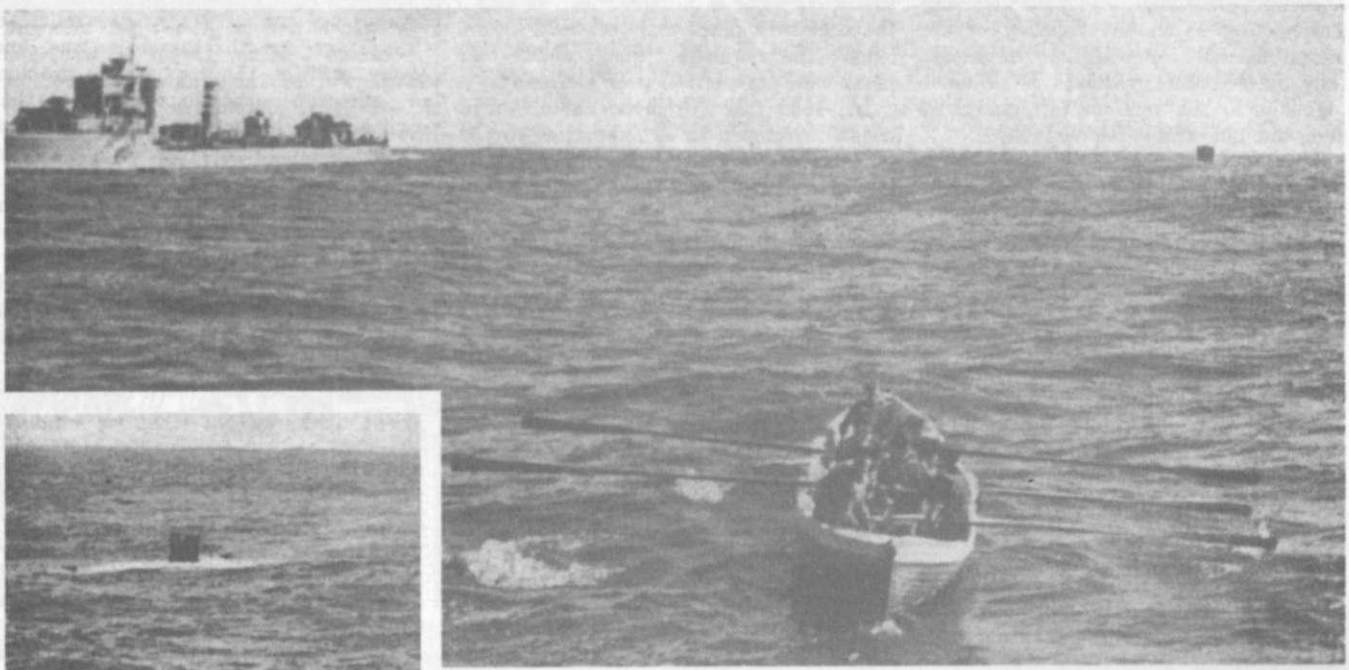
Photo-Story of the Life and Death of a U-Boat

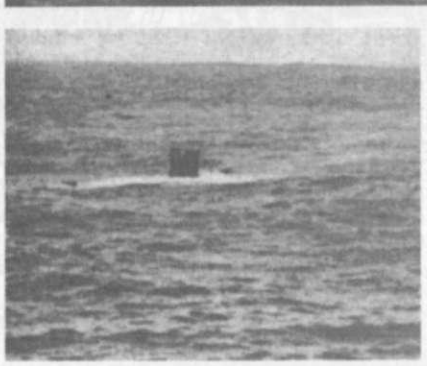
Left is the conning-tower of a U-boat putting to sea in search of British merchant-ships. In the centre photograph she is out in the North Sea, and a keen look-out is being kept for any ship that may become her prey—and for one whose prey she may become. As soon as a ship is sighted the submarine is submerged from the engine-room, right, and only the periscope shows above water.





The ship eventually sighted was a small coasting steamer, an easy victim as its slow speed made escape impossible. The U-boat commander chooses to use one of his few precious torpedoes and, left, a cloud of smoke is rising as it strikes the defenceless hull. Right is the scene a few minutes later. The crew have taken to their boats, and the little ship plunges stern first to the bottom.





Quite frequently it is the U-boat's worst enemy, a British destroyer, that is sighted. The result is seen above. Depth charges have been dropped, and later a part of the shattered hull came to the surface, left. Above, a boat has put off from the destroyer to look for survivors.

Photos, Topical and G.P.U.

Hunter and Hunted in the Submarine War

Based on an article in "The Navy," the monthly organ of the Navy League, this account by Mr. Maurice Prendergast of recent development of the U-boats and the British counter-measures has a very topical interest.

In the autumn of 1918 the U-boats were held at bay, but had by no means been mastered. Ample evidence existed that, in the spring of 1919, they were prepared to deliver a third and yet more terrific onslaught. However, thanks to the introduction of convoying, the establishment of great mine-barrages across the North Sea, and a vastly increased output of anti-submarine equipment and other expedients, our mercantile losses had been brought down, by the autumn of 1918, to the level of about 140,000 tons per month. This rate was tolerable, as the output of new shipping exceeded the scale of losses.

So much for matters from our own point of view. How did they look from the enemy's? On this score we have first-hand testimony at command, in the shape of reminiscences of commanding officers of the old U-boats.

They are unanimous in the opinion that the depth charge is a terrible weapon for the crew of any submarine to face. They declare that it was extremely difficult to make a successful attack upon a convoy, if that convoy was accompanied by fast, numerous and well-armed escort vessels. They admit that our introduction of the paravane was a bad blow to them, for it nullified the war value of that half of the German submarine force which had been devoted to minelaying craft. They admit that the unfinished Anglo-American minefields between Scotland and Norway were becoming "a formidable obstacle" to their operations. They had an exaggerated notion of the efficiency of our anti-submarine detecting hydrophones. They hated and dreaded the English "Q ships," but our aircraft, in those days, did not worry them much.

Between the fateful November of 1918 and September of last year, there is an intervening span of nigh on twenty-one years. During that interregnum of peace submarine and anti-submarine were arming for the renewal of the fight.

Evading the Versailles Ban

The disarmament of Germany under the Versailles Treaty included a strict injunction that she should not build or acquire any further submarines for her fleet. Despite the prohibition, submarines continued to be built to German designs and by German labour—but in shipyards outside the Third Reich!

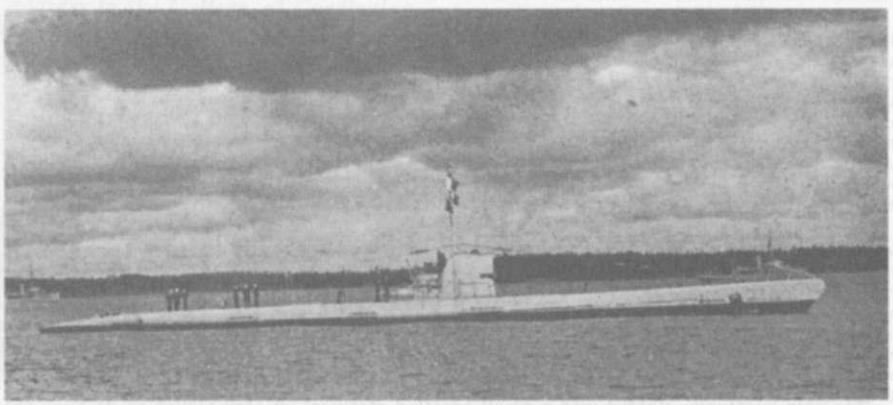
First of all, there was established in Holland a concern known as the "Nederlandsche Ingenieurskantoor voor Scheepsbouw" (Dutch Technical Centre for Shipbuilding). Outwardly it was a Dutch organization, but inwardly it contained a strong assembly of German naval architects and technicians, all proficient in the designing and building of war vessels. Most significant was the fact that the presiding genius of the N.I.V.S. was no other than the famous Dr. Techel, who, during the war of 1914–18 had been Chief of the Submarine Building Branch of the great Krupp-Germania shipyard at Kiel.

In 1927 a Dutch firm produced, under the auspices of the N.I.V.S., two submarines for the Turkish Navy. They were pretty well replicas of the "UB.III Type," which had been built for the Kaiser's Navy in 1916–18. Next came the acquisition of a large share in the Crichton shipyard at Abo, Finland, by the German Vulkan A.G. of Stettin, whereupon the production of submarines for the Finnish Navy was begun. It was the N.I.V.S. at The Hague which provided the necessary plans and technical knowledge; the requisite skilled labour and plant were transferred from Germany.

In 1935 the Crichton-Vulkan firm began to build a small submarine to the order of nobody in particular. Following this came news that the firm of Echavarrieta y Larrinaga at Cadiz, in Spain, was building a mysterious underwater vessel which had not been ordered by any Government. For her building "plans and material were being imported from Holland." The designs, once again, were the product of the N.I.V.S. It was suspected that these Finnish and Spanish vessels were actually "pattern boats" which were being created to serve two purposes. The first was to test the rapidity with which identical vessels could be assembled in German shipyards; the second was to prove the sea performance of new types before they were put into production.

After this, large contracts were placed with German marine engine builders for sets of high-speed Diesel engines, and the outside world was told that such machinery was required for "new coastal shipping." Sectional parts for construction of submarine hulls were quietly collected in the German yards—and then all disguise was dropped. Germany declared that she had resumed the construction of U-boats.

And what was happening on the British side in all the years that separate 1918 from 1939? We emerged from the last war with one bitter experience branded indelibly on our memories. It was the knowledge that, in the spring of 1917, the ghastly slaughter of our shipping had brought us to the brink of ruin, starvation and surrender. We were determined that the like should never happen again in any future war we undertook. In the depth charge, we had certainly discovered a most potent weapon against hostile submarines, if—and always if!—it was applied in the right place and at the right moment. "Location" of the target is, was, and always will be the crux of the problem in offensive operations against that invisible antagonist, the submerged submarine. Accordingly, as soon as our Navy had settled down to its post-war organization, we concentrated our scientific knowledge, technical abilities and engineering resources upon intensive research for the perfection of the anti-submarine directional hydrophone. That would find the submarine for us—and then we could depth-charge it!

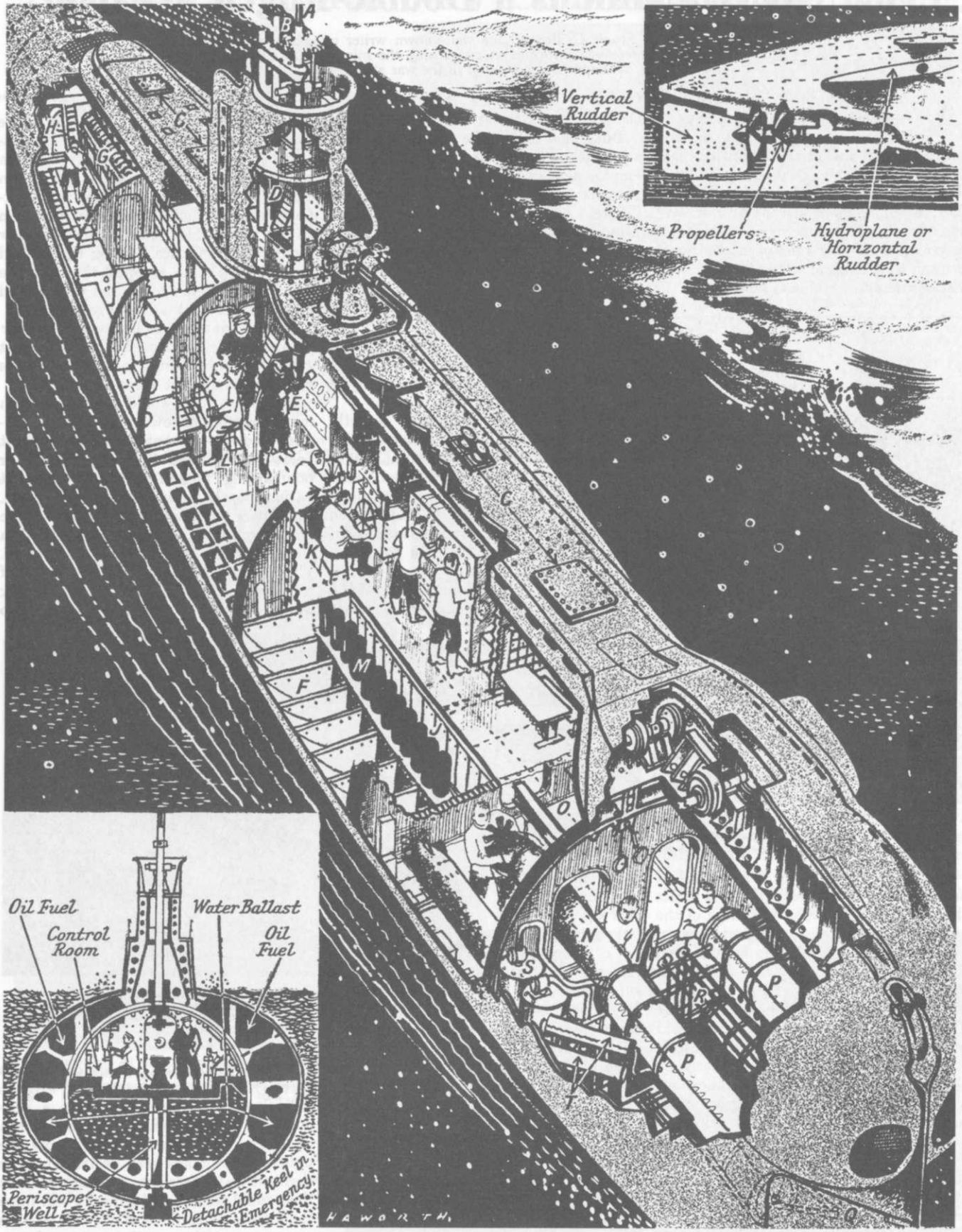


The Finnish submarine, "Iku-Turso," was one of three built at the Turku (Abo) shipyard in 1930 and 1931. In this yard, largely the creation of German experts, other warships for Finland have been built. *Photo, Derek Wordley*

At last, after the most laborious and patient work, we got what we wanted. Details of the modern British anti-submarine directional hydrophone are, most properly, kept in the closest secrecy. It has been declared in Parliament that, in this branch of naval equipment, we have resources far in advance of any employed by any foreign Navy. That this declaration is true, the modern U-boats know.

So Foch's prediction that "the next war will begin where the last one ended" has come true, so far at least as the U-boat war is concerned.

How a Submarine of the 'Ursula' Class is Operated



This submarine is one of the same class as the gallant " Ursula " (see p. 565). Known as the Coastal Type, they displace only 540-730 tons. Their armament is six 21-in. torpedoes, and the surface speed 11·25 knots. They carry a crew of 27.

The sectional drawing shows the boat cruising just below the surface with a foot or so of periscope A above water. To get into this position the wireless mast B is lowered and all outside gear stowed and hatches C closed. The commander climbs down ladder D into control-room and takes his place at eye-piece of periscope E. Water is run into ballast tanks F, and boat is trimmed. Diesel engine G is stopped and electric motor H started from battery tank J. As boat moves forward men at K move fore and aft hydroplanes into correct position to make boat dive slightly and stay there. L steers by vertical rudder.

When the boat is required to rise, the water is forced from the ballast tanks by compressed air, which is stored in bottles M. When torpedoes N are to be fired, crew in torpedo storage O slide torpedoes into firing tubes P, open watertight door Q by means of mechanism R. Torpedo can then be fired by compressed air stored at 2,000 lb. pressure in tanks S. Actual firing is done by cylinders T, at 500 lb. pressure. Torpedoes can also be fired from amidships or from stern.

Picture-diagram specially prepared for THE WAR ILLUSTRATED *by Haworth*

The Modern Mine is a Double-Edged Weapon

Contributed by Mr. Frank C. Bowen, the well-known writer on Naval affairs, this article gives much interesting information concerning the mines which have become so important a weapon in the war at sea.

ALTHOUGH it was regarded for generations as being a purely defensive weapon, and as such perfectly legal within the limitations laid down by the Hague Convention of 1907, the Germans proved during the late war that the mine could also be an offensive one. In that role, however, it is difficult to keep it within the rules of international law and humanity, and the Germans have made little effort to do so in any case.

The first minefields laid in the North Sea are shown in page 398; this sketch map shows the British East Coast minefield, whose existence was announced on December 27. Also indicated is the area off Heligoland Bight, systematically patrolled by the R.A.F.

The necessity for controlling the use of mines comes from their inability to select their victims. The man in charge of the gun or torpedo has the opportunity of identifying his target before he fires, and if he sinks a neutral ship it is deliberate. Mines will detonate under any vessel, and it was therefore agreed by all nations at The Hague that they should not be laid where they could sink harmless neutrals who could not avoid them and that they should automatically become innocuous as soon as they broke from their moorings and drifted away from their published position.

The new British minefield, covering practically the whole east coast of Great Britain, is perfectly legal because its exact limits have been clearly published to the whole world, and neutral ships on their lawful occasions can pass round either end without the least danger from it. If they try to pass through it, there can be no doubt that their purpose is unneutral and that they are working for Germany. The same thing applies to the published German minefield.

But mines laid in the open sea without any warning, which is the essence of the employment of the minelaying submarine and the magnetic mine, are in quite a different class and offend against all the promises given by the German Government in 1907 and confirmed by Hitler before, and Grand Admiral Raeder at the outbreak, of the war. The secrecy of their position is the reason of their success, and neutrals cannot avoid them unless they stay in port.

These secretly laid minefields are an essential part of the German submarine campaign; the U-boats which lay them are also fitted with torpedoes and guns against commerce. While many magnetic mines have been laid by 'planes, this was probably only intended to be a temporary measure while the submarine minelayers were being completed, and once the first surprise was past the R.A.F. Security Patrol made an excellent antidote.

The submarine is the most dangerous layer of mines in narrow waters, and the mine is her most dangerous enemy. Of the British submarines lost in the late war, nine are known to have been sunk by mine, no other weapon securing more than four, and probably most of the 21 which "went missing" were due to the same cause. Forty of the 199 U-boats which did not return are known to have been mine victims, and again there were many whose loss was unexplained but probably due to the same cause.

The two great fields which "contained" the German submarine fleet were those in the Straits of Dover, laid at the outbreak of war but not made fully effective until 1918, and the Great Northern Barrage between Norway and the Orkneys, into which the British and American navies put 63,117 mines in the last few months of hostilities. Being legally laid and notified, this stopped short at the edge of Norwegian territorial waters, and the Germans took advantage of them.

In those days it was necessary, in order to make a field reasonably proof against submerged submarines, to lay an enormous number of mines at various depths.

A modern field would generally—with many exceptions owing to local conditions—consist of contact mines laid just below the surface to catch raiding or bombarding men-of-war and mines at various depths for submerged submarines. The latter, it must be remembered, are very much more susceptible to explosion close to them than a surface warship. They do not possess the same margins of stability or buoyancy, so that the shock which would be merely uncomfortable to an ordinary ship, and perhaps cause leaks with which the pumps can deal without difficulty, is often disastrous to a submarine. In many cases they have been rolled right over, and in many more the lighting circuit has been destroyed. The slightest leak is serious, not only because their small reserve of buoyancy will force them to come to the surface, but because sea water getting to their accumulators will generate the deadly chlorine gas.

And then there is the terrible nerve strain of passing in a submerged submarine through an area known to have been sown with mines.

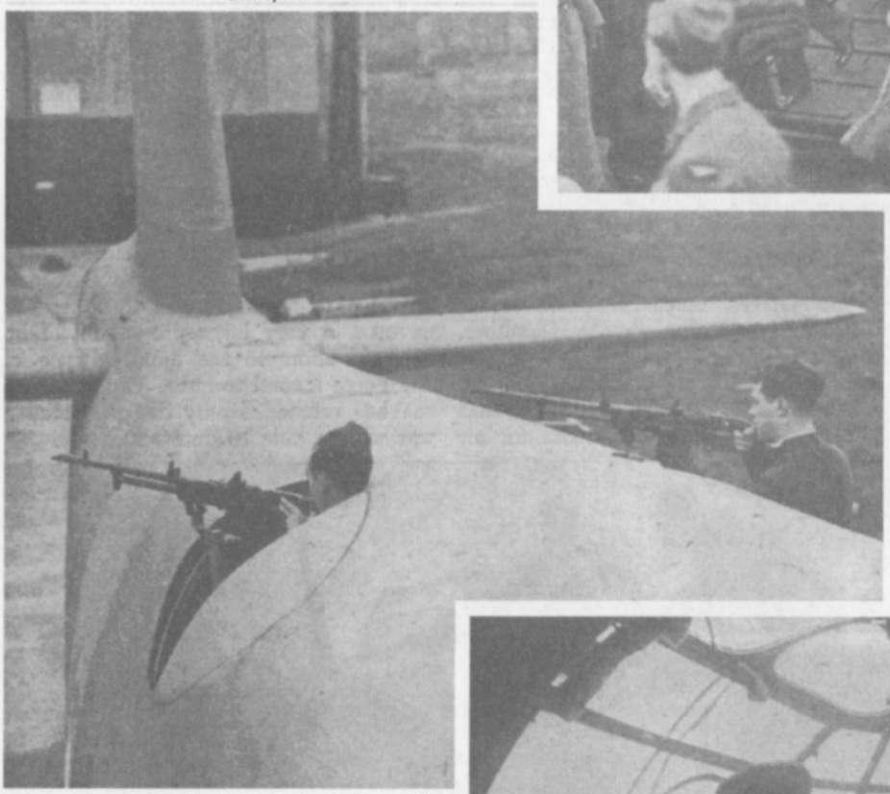
One of the chief differences between the German and British mines is that the latter are automatically rendered harmless in the event of their breaking adrift. One such vagrant is seen in this photograph being recaptured.

Photos, Sport and General

Australia's Airmen Now Comrades of the R.A.F.

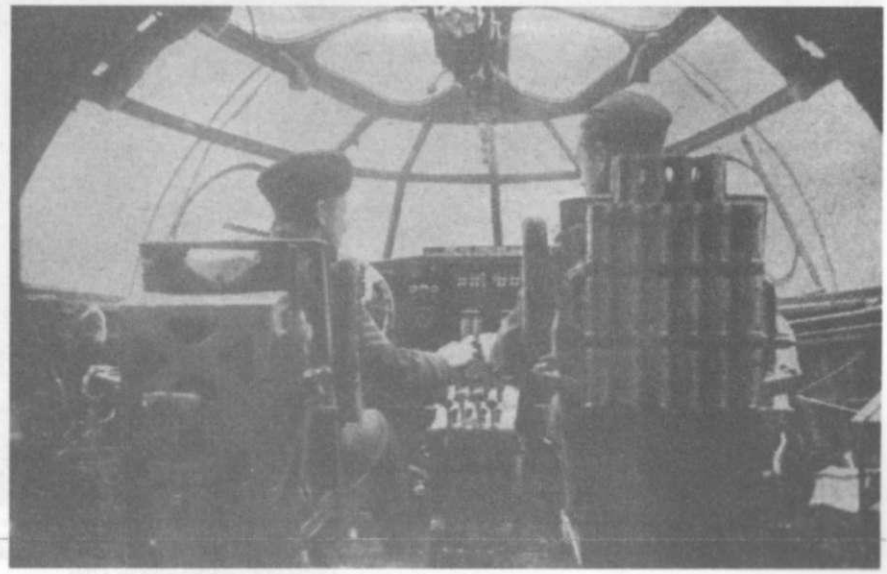
Australian airmen who have just arrived in England will have their first experience of war service with the Coastal Command. Above, pilots are studying charts before going on one of their first patrols.
Photo, Fox

The first squadron of the R.A.A.F. came ashore on December 26, 1939. Besides pilots there were gunners, observers and ground staff. *Photo, Associated Press*



Two airmen of the Royal Australian Air Force squadron now serving with the R.A.F. Coastal Command are seen here at the two gun positions amidships in the hull of a "Sunderland" flying boat.
Photo, Fox

IN a message to the first Australian squadron to land in Britain, Mr. J. V. Fairbairn, Australian Minister for Air, said: "A great responsibility rests upon you as members of the first Australian Air Force squadron to come on active service in this country. You will be comrades in a great and just campaign with the men of the R.A.F., and Australia is confident that you will play your part in whatever spheres you may be called upon to serve."



On the right, R.A.A.F. personnel getting the feel of the controls of one of the Short "Sunderland" boats (see diagram, page 533), which they have come to Britain to fly.
Photo, Associated Press

How Big a Threat is Germany's Air Force?

Following some account of the pre-war organization of the German Air Force, this article goes on to introduce us to the uncertain mathematics of German aeroplane production and first-line strength of 'planes.

ALTHOUGH it was only in the spring of 1935 that the German Air Force—the Luftwaffe, "air arm"—was officially constituted, it has since been built up into an instrument of national policy of the most impressive size and formidability. One great advantage it has had is the fact that it is the favourite child of Field Marshal Goering, who was a German air ace in the Great War.

Not the least important of the many offices which Goering has collected is that of Air Minister, and his position as industrial dictator of the Reich has led to a state of affairs in which Germany's Air Ministry is an almost autonomous power in the Nazi State. Not only is the whole of the German aeronautical industry under its (or his) authority; not only are all the aerial forces of whatever kind—bombers, fighters, reconnaissance and co-operation 'planes, etc.—all the aerodromes, the recruiting and instruction of airmen and ground staff, at its immediate disposal, but, in addition, the whole of the anti-aircraft defence and even the whole system of passive defence—that which we know as A.R.P.

In February 1938 the Air Force was reorganized on lines which were still in force when the war started, and, so far as we can tell, are still in force today. The territory of the Reich is divided into four huge Air Commands, each under an Air Fleet Commander who has under his control all the means necessary for the conduct of an aerial war, both offensive and defensive, in his particular area.

To feed this vast concentration of offensive and defensive air power there is an aircraft industry which has been brought to a high level of efficiency. In May 1939 "Aircraft Engineering" stated that it comprised some 29 firms with 51 factories, not counting a very large number of sub-contractors and manufacturers of accessories. None of these factories, be it noted, was situated near a dangerous frontier, but were distributed in central Germany and along the Baltic coast. One peculiarity of the German system is the separation of the factories in which the original types are designed from those devoted to mass production. Thus at Warnemuende, near Luebeck, is the vast array of flying grounds, hangars, and workshops where Heinkel types are built and tested, while the firm's main production is centred at Oranienburg, just north of Berlin.

The Junkers firm has five groups of factories for airframes in central Germany, besides three for complete aircraft; even in peacetime its personnel exceeded 25,000 workmen. The former Zeppelin works at Friedrichshafen are used by the Dornier company. The Messerschmitts are produced at Augsburg.

No one can say with certainty what was—still less, what is—the strength of Germany's Air Force. In October 1938 M. Paul Rives, official reporter of the air estimates of the French Chamber, estimated the first line strength of the German Air Force at between 4,500 and 5,000 'planes. He went on to state that the German aim was to create an air force between 8,000 and 10,000 machines by 1940 at the latest. Before the war Germany's 750 aerodromes had an estimated capacity of between 10,000 and 12,000 machines, and no doubt many more flying fields have since been constructed. Then the American journalist, Mr. Garrison Villard, on returning from a visit to Germany in November 1939 stated that he had heard there the most astounding figures as to the size of the air fleet that was being accumulated for a spring attack on Britain. Even if those assertions were heavily discounted, he said, "there still remains the figure of 30,000 machines to be available when good flying weather returns."

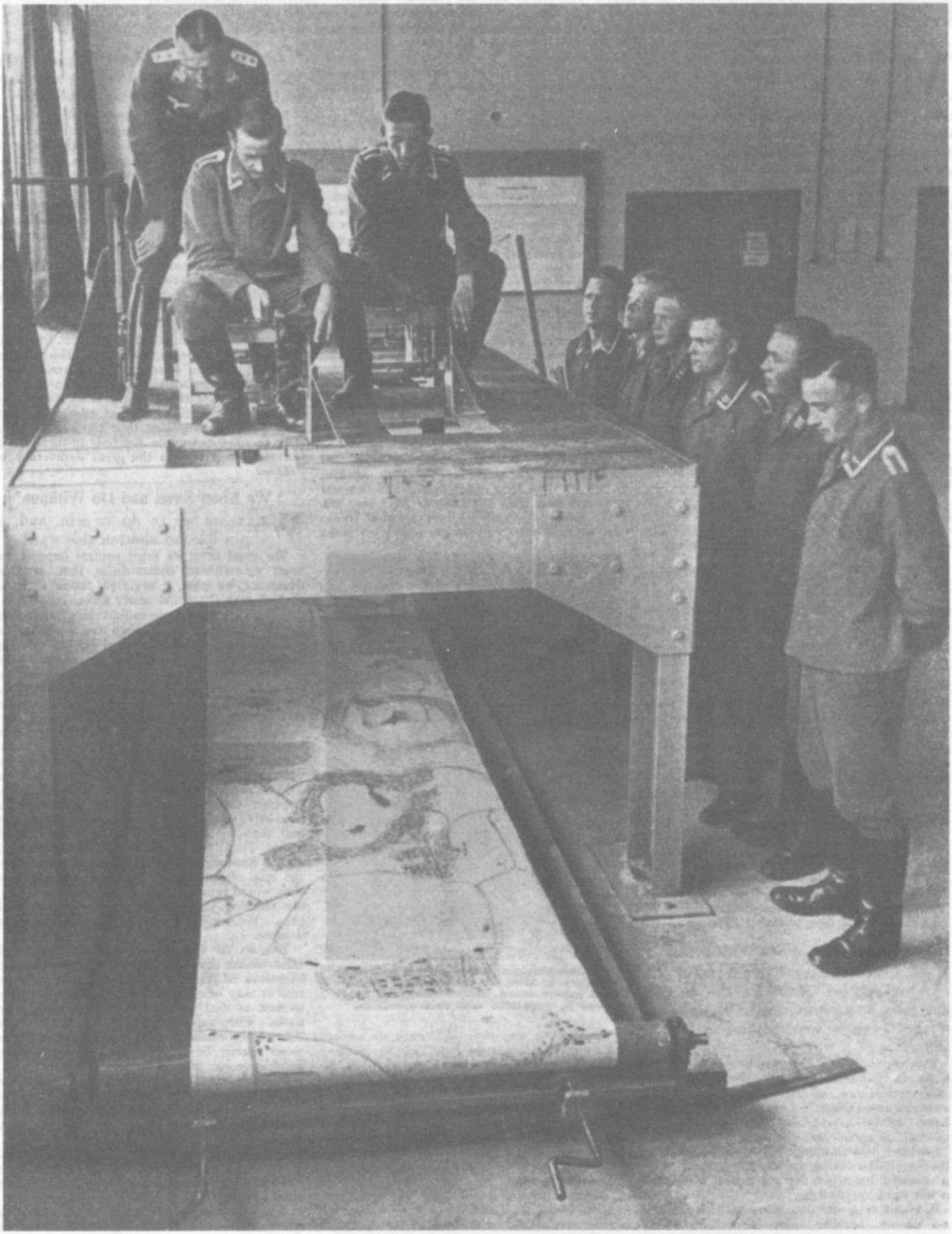
It is only fair to say that many authorities regard such figures with high suspicion; a force of 30,000 aeroplanes would require a ground staff to maintain them of about 300,000 men, and it is improbable that Germany has either men or material on this colossal scale.

Besides, as Dr. Brinkmann, then Vice-Director of the Reichsbank, is reported to have asked at a meeting of Nazi chiefs in February 1939: "What is the use of all these aeroplanes if we have no oil for them—and we still are short in that respect?" But when every allowance has been made for the exuberance of Nazi propaganda, the fact remains that over a period of several years Germany has devoted a very large proportion of her national effort to the building up of an Air Force second to none. Just how far she has succeeded only the grim trial of war will be able to determine.

Though many have alleged that the Messerschmitt single-seater fighter (type ME 109) has shown grave failings in the testing time of war, there is little doubt that it is, in fact, efficient and of high-class workmanship. Moreover, a special version holds the present world's speed record at 469·2 m.p.h. Above is a pilot climbing into his Messerschmitt, one of the newer machines with the 1,000 h.p. Daimler-Benz engine.

Photo, International Graphic Press

Are They Practising for a 'Blitzkrieg' in the Air?



Young Nazi airmen are put through an intensive course of training. They are here learning the far from gentle art of bombing. In this ingenious apparatus a map on rollers passes beneath the pupil showing a stretch of country as nearly as possible as it would appear seen from an aeroplane flying at a great height and speed. When the lever releasing the bomb is pulled the aim is automatically registered on the map.

Photo, Dorien Leigh

'WHAT ARE WE TO DO TO WIN THIS WAR?'

At the opening of a year which must be fateful in the history not only of our own country but of the whole of Western civilization, Britain's Prime Minister delivered at the Mansion House, London, on January 9, a speech which was at once a warning of the grim things which may be in store and an encouragement in the path that must be followed to victory.

MR. CHAMBERLAIN opened his speech by saying that since war broke out, his sole thought and all his actions had been directed to doing all he could, in the closest collaboration with France, to bring the war to a successful conclusion. He went on:

Once again, as twenty-five years ago, the historic buildings and the ancient streets of Britain are looking upon the faces of the King's subjects who have come here from all parts of the world of their own free will, far away from their homes and their families, to take their part side by side with us in the great struggle that is before us.

Their presence here and the profound conviction of the necessity of putting an end to the German policy of constant aggression—which alone could have induced them to undertake such sacrifices—has brought to the aid of the Allies not only a most welcome addition to their fighting strength, but what is perhaps even more valuable, the moral support of their unanimous approval of our cause.

This New Year, which will probably be a fateful one in the history of the world, has opened quietly, but it is the quiet of the calm before the storm. We are at war.

It is only on the sea that the war may be said to be in full operation, and it is on the sea that we can discern most clearly the trend of hostilities in the first four months of war.

AFTER surveying the respective gains and losses of the belligerents at sea, Mr. Chamberlain said that inexorable pressure of sea power acting upon the enemy was producing ever-increasing difficulties for her whole economy and for her ability to carry on the war.

Germany (he went on) used her brute force upon unhappy Poland, and today we can see how she is treating the Poles and the Czechs—exploiting their resources, carrying off their food, starving and shooting the people, tearing and uprooting them from their homes to make way for Germans who, in their turn, have been forced to leave the lands where they and their families have been settled for generations.

And now it is the turn of Finland to be attacked by that Power with whom Germany made an unholy pact and to whom she set the example of aggression.

Finland today, amidst her snows and her frozen lakes, is fighting against the forces of unscrupulous violence, just as we are ourselves.

Our Close Association With France

MR. CHAMBERLAIN then referred to the assistance given by the British and French governments to the victims of the Turkish earthquakes, and continued:

This collaboration between France and ourselves for humanitarian purposes is only just another instance of that close, that even intimate, association between us which now covers every aspect of the war—military, political, financial and economic.

I cannot help thinking that our experience of this association during the war will prove it to be so valuable that when the war is over neither of us will want to give it up.

It might even develop into something wider and deeper, because there is nothing which would do more to facilitate the task of peaceful reconstruction which has got to be undertaken at some time—there is nothing which would contribute more towards the permanence of its results—than the extension of Anglo-French collaboration in finance and economics to other nations in Europe and, indeed, perhaps, to the whole world."

Mr. Chamberlain spoke of our mobilization as prodigious, and, dealing with the civil defences, said:

Whilst we have already reviewed all our different precautions and modified and amended them where we thought that we could do so without disregarding the important factor of safety, **I do not consider that the risk of air raids is over or even that it has diminished.**

And as long as that is so I am certain that we should make a capital mistake if we were to reverse the policy that we have hitherto followed—the policy which I may sum up by saying that it is the evacuation, while the evacuation can be carried out free from bombs and machine-guns, of all who can be evacuated without the serious loss of efficiency.

PAYING a tribute to the British people's willingness to make sacrifices to win the war, Mr. Chamberlain said:

What I am not quite so sure of is that they understand what they are up against, or that we shall have to face a phase of this war much grimmer than anything we have seen yet.

We have got to do without a lot of things that we shall miss very much, and I am going

Mr. Chamberlain delivering his speech on January 9, 1940, at the Mansion House—that speech which, as one New York paper had it, "crackled with determination."

to try to show you why. Although we are not yet actually fighting on land, we are making preparations to enable us to do so with the greatest effect whenever the right moment comes.

For that purpose, we are devoting more and more of our man-power to the production of armaments. That must mean that there is less and less of our man-power available to produce civilian goods.

Even supposing we had ample supplies of labour we should still have to curtail our imports of goods which are not necessary for the prosecution of the war, so as to leave available our resources of foreign exchange and of shipping to purchase and to bring home in ships imports of those things which we cannot do without.

Saying that he did not think anyone at home would complain of the necessary sacrifices, the Premier continued:

Nearly a year ago, speaking in the House of Commons, I warned the country that it was the intention of the Government, on the outbreak of a major war, that direct taxes, already so heavy as to constitute conscription of wealth, would be still further increased.

That prediction was fulfilled when my heavy-handed friend and colleague [Sir John Simon] last September placed his little finger upon the shoulder of the income-tax payer.

Already, the wealthier classes have suffered a very heavy reduction in their income, and we have left them mighty little prospect of being able to increase it again.

I don't say that we have come to the end of our demands upon them, but . . . it is not possible for them alone to solve the problem of how to reduce consumption of unnecessary articles, because two-thirds of the consumption of the people of this country is by those who only have small incomes; and, therefore, I say that it is necessary that they too should make their sacrifice as is done, not only in totalitarian Germany, but also in the great democracy of France.

'We Must Save, and Do Without'

WHAT are we to do to win, and, if possible, to shorten this war?

We must save, we must control imports, we must do without commodities that are not necessary, we must, if required, ration them so that all may share and share alike.

"If you find that you cannot buy the woollen goods that you have been accustomed to, remember that wool is wanted for the clothing of the Army. If you are asked to lessen your consumption of bacon and sugar, remember that you are making available space in ships which can be used for iron ore or machine tools. If you are asked to put your savings into Savings Certificates, instead of spending them, remember that you are giving help to the Chancellor in his Herculean task in finding the wherewithal for our unprecedented expenditure.

It is becoming increasingly clear that the German Government has long planned the successive stages of a programme of conquest, and that its appetite grows by what it feeds upon. Today the members of that Government do not hesitate to say that they desire to achieve the ruin of the British Empire, and no doubt they would rejoice if they could treat us as they are treating the victims already within their grip. We on our side have no such vindictive designs.

But, on the other hand, the German people must realize that the responsibility for the prolongation of this war, and all the suffering that it may bring in the coming year, is theirs, as well as that of the tyrants who stand over them. They must realize that the desire of the Allies for a social, human, just, Christian settlement cannot be satisfied by assurances which experience has proved to be worthless.

In his recent message to the Pope the President of the United States declared that only by the friendly association of the seekers of light and the seekers of peace everywhere can the forces of evil be overcome.

I profoundly agree. But I would add that, **if the forces of right are to prevail, we must not hesitate to risk our blood and our treasure for so great an end.**

Against such a combination as that, the powers of wickedness will fight in vain, and we, at the beginning of this New Year, can await the future with unshaken confidence in the strength of our arms and in the righteousness of our cause.

Eye Witness Stories of Episodes and Adventures in the Second Great War

We Saw Our 'Planes Bomb a U-Boat

Attacked by a submarine in the Atlantic, crew and passengers of the freighter "Fanad Head" took to their boats, and before being rescued by a destroyer were spectators of a battle between the U-boat and British aircraft. This broadcast eye witness story by K. E. Halnan is illustrated with photographs (later developed on the "Ark Royal") taken by his brother, who was on board.

I WAS a passenger on board a large freighter, the "Fanad Head," bound for Belfast from Montreal with a cargo of grain: there were nine passengers altogether. The first part of the voyage passed uneventfully. Then one morning, as I was sitting in the saloon after breakfast, I heard somebody running to his cabin and there was a continuous ringing of the ship's bells. The captain had sighted a submarine about five miles away on the starboard bow, approaching us at full speed.

I rushed to my cabin, put on my mackintosh and lifebelt, stuffed a few of my most treasured possessions in my pockets, and went on deck. There I found the other passengers assembled near the lifeboats. The ship had altered course and the submarine was dead astern, visible as a black speck surrounded by large white bow-waves and with dense black smoke pouring from it—evidently German engines as well as British were being driven to their utmost capacity.

With her superior speed the submarine gradually but surely overhauled us, and after an hour-and-a-half's chase the captain decided to abandon ship. While the boats were being made ready for lowering, the bos'un suddenly shouted "He's going to fire," and everyone took cover as we heard the noise of the shell. The shell passed clear of the ship and we resumed our preparations for departure.

During all this time the wireless operator had been at his post, sending out an S O S, and had got in touch with an American ship. In addition, although we did not know it at the time, the Navy had also got our S O S.

The boats were launched and we all got into them. After we had rowed a short distance from the ship the submarine came alongside the boat I was in and the commander spoke to our captain. The submarine was a modern type, painted a dirty yellowish green except for the conning tower which was dark green, with an armament consisting of a machine-gun similar to the Bren gun, and a small gun firing shells weighing a few pounds, which we had already seen and heard in action. The commander asked us in perfect English what our cargo was, appeared somewhat disappointed when he found it was grain, told us an American steamer was coming to pick us up, and then gave us a tow to our No. 2 lifeboat which was about four hundred yards away. He then cast off our painter and told us he was going off to sink the ship, after which he would come back and give us a tow. We made fast our No. 2 lifeboat, threw overboard a sea anchor, and stood by to watch events. The submarine partially submerged and went towards the ship, standing off for a little while before finally going alongside, where it remained some considerable time.

Meanwhile the lifeboats were rocking about badly in the swell and more and more of the passengers and crew were becoming sea-sick. After waiting monotonously for some time, we suddenly got the surprise of our lives. In the distance beyond the ship we heard a low hum and saw a dark speck that resolved itself into an aeroplane. At first we thought it was a transatlantic flying boat, but as it rapidly approached we saw that it was a monoplane of the Fleet Air Arm fully loaded with bombs. As soon as it came near the ship it dived on to the submarine and released four bombs. The submarine crash-dived and the monoplane turned, released three more bombs and then disappeared behind the ship. About ten minutes later another 'plane flew over the boats and flashed us a message by signal lamp, "help coming."

By this time we were all excited and sea-sickness was forgotten. Then, just as we had decided that the submarine must have been sunk, she reappeared and again approached our ship. Soon after this the monoplane reappeared and dived towards

As related in this page, the survivors of the British freighter "Fanad Head," who had taken to their boats when the ship was attacked by a German submarine, had the thrill of seeing the U-boat attacked and bombed by a British aeroplane. A companion 'plane is here seen diving low over one lifeboat, cheered by the crew (*see also* photos in page 637). *Photo, G. A. Halnan*

I WAS THERE!

the submarine. This time the submarine made no attempt to submerge and we heard a crackle of fire as though heavy machine-guns were operating. Soon afterwards six biplanes appeared in sight and circled over the area as if searching for the submarine which had again submerged. Suddenly a tremendous vertical explosion occurred on the starboard side of our ship, and immediately the six planes swooped down on an area of the sea about half-a-mile from the ship—swooped down just like a lot of hungry gulls after bread—and dropped many bombs. We could easily see the explosions. Evidently the submarine had torpedoed the ship and the track of the torpedo had given the submarine's position away to the hunting aircraft.

Having completed their task the aeroplanes flew over the lifeboats and were wildly cheered by all of us, then went off. Meanwhile our late ship, badly hit by the explosion, began slowly to break up. First the masts slowly canted towards each other, then the funnel gradually sank in the water, then the two boilers exploded one after the other, the bow and stern slowly rose in the water and finally disappeared from view almost touching each other as the ship finally sank from view.

We now saw a slight smoke haze on the horizon and soon we could distinguish the masts of two destroyers approaching us. While the first destroyer that reached us circled round, evidently still seeking the enemy, the second by clever manoeuvring came to a standstill near enough for us to row alongside and to make fast to lines thrown to us from her deck. Two days later we were landed at a fishing village in the North of Scotland.

A new twin-engined Messerschmitt 110 long-range fighter, also shown sectioned in page 555. This was the German type engaged in the battle described below.
Photo, "The Aeroplane"

Our Three Bombers Fought Twelve Fighters

In an air battle off the German coast on January 2, three British bombers were engaged by twelve Messerschmitt fighters. One of the German 'planes went down in flames and two others were driven down, while of the British 'planes one was shot down and one was missing. The story of the pilot who returned is here reprinted from the "Evening Standard."

"WE gave as good as we got," was the comment of the pilot of an R.A.F. bomber which alone returned from a battle between three bombers and twelve Messerschmitt long-range fighters near the German coast on January 2.

At a point about eighty miles north-west of Heligoland and about eighty miles north of Borkum, when our bombers were on close formation and flying at about 10,000 feet, they were suddenly attacked by the Messerschmitt 110 Squadron.

The pilot of the aircraft which returned said:

"We were going south when suddenly the look-out man shouted 'Fighters!'

"Almost before he had given the warning I saw their streams of white tracer bullets flashing past on one side.

"I then realized this was a serious battle. We had not seen the enemy because they came straight out of the sun.

"The first burst of enemy fire penetrated our fuselage but did no material damage.

"We found ourselves fighting about twelve of the enemy. More bullets entered our aircraft, and some of them missed us by a few inches."

Six Messerschmitts made three dual attacks on the bomber, which escaped after bringing down two of its attackers.

We Were Torpedoed on Christmas Day

On December 25, 1939, while members of the crew were celebrating Christmas below decks, the London steamer "Stanholme" was sunk without warning by a German submarine and fourteen lives were lost. The stories of two of the eleven survivors are here reprinted from the "News Chronicle" and "Manchester Guardian."

THE U-boat was sighted by a deck-hand too late to raise an effective alarm. Within five minutes the "Stanholme" had disappeared.

The ship's boats were smashed by the explosion of two torpedoes, but two of the hands lowered a raft. For a quarter of an hour they were rowing around the spot where the "Stanholme" had disappeared and were able to assist those still in the water. For nearly an hour 11 people remained on the raft. It had, however, been damaged by the explosions, and when a lifeboat from a Norwegian steamer arrived on the scene the raft was sinking.

After the sinking of the steamer "Stanholme" described by eye witnesses in this and the following page, the survivors were landed at Cardiff. Above, the first officer, Mr. T. G. Phillips, who was injured in the head, is being visited by his wife in the Seamen's Hospital.
Photo, Fox

Among the survivors was Mrs. Jenvy, wife of the chief engineer, who said:

"The captain had poured us out drinks in his cabin and had wished us all a merry Christmas, when a terrible explosion occurred which threw us to the floor.

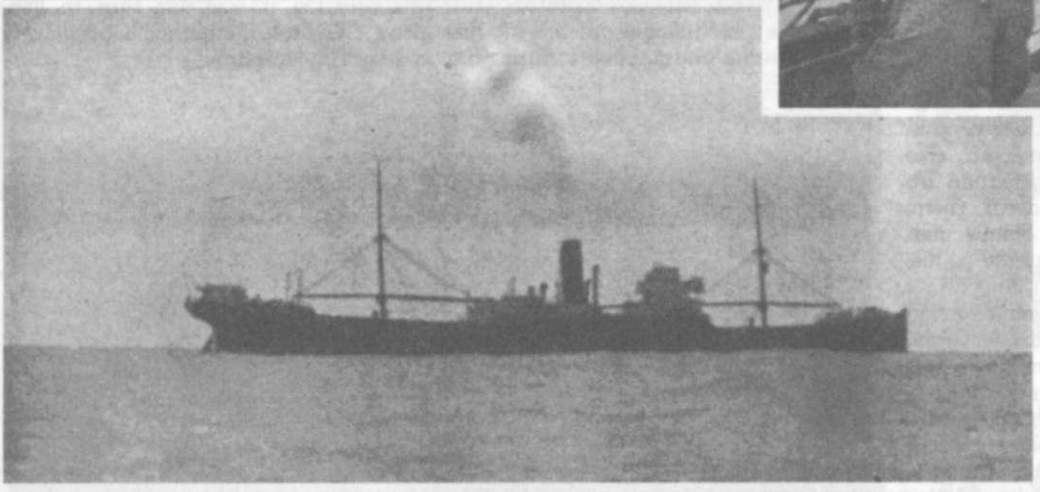
"We rushed on deck as the vessel began to heel over, and a second explosion shook us.

"My husband ran to the lifebelts, put one over my head and threw me into the water.

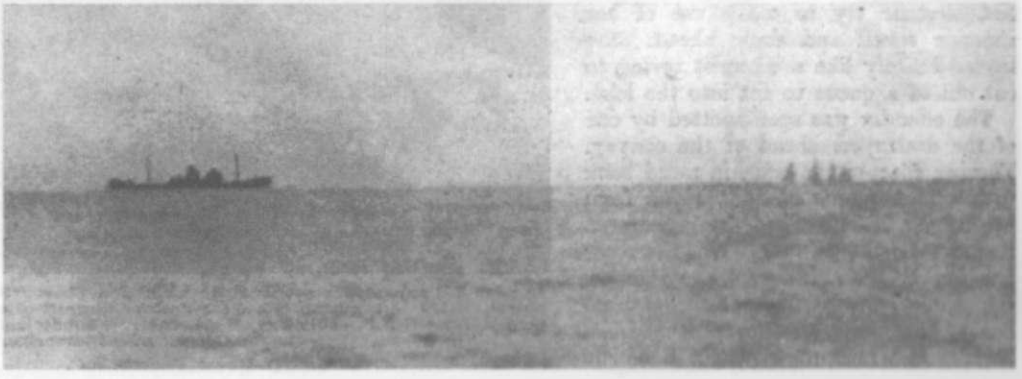
"That was the last I saw of him, for he went down with the ship.

I WAS THERE!

Victims See Swift Revenge on the U-Boat that Sank Their Ship



The group of passengers, top left, on board the S.S. "Fanad Head" sunk on September 15 have been told that a U-boat is chasing their ship and is slowly overhauling it. They are awaiting without a sign of panic whatever Fate may have in store for them. Meanwhile, the crew are launching the life-boats, above, for the U-boat has fired a warning shell. A little later the passengers and crew took to the boats.



Centre is the last close up view of the ship, taken from one of the boats as it pulled away from her. Soon afterwards the U-boat fired a torpedo and, above, a cloud of smoke arose as the ship was struck. But a few minutes later the victims saw British aeroplanes approaching (*see* p. 635), and while their ship was still afloat a rain of depth charges, seen in the photograph right, sealed the fate of the submarine.

Photos, Copyright G. A. Halnan

I WAS THERE!

"I could not swim, but the lifebelt kept me floating in the coal-dust-covered sea, until a Norwegian vessel picked me up.

"The captain of the Norwegian boat was very kind and gave us clothes, food and hot drinks."

Seaman E. L. Evans said: "We left port early on Christmas morning and were torpedoed less than three hours later. We were having breakfast when suddenly there was a terrific explosion, followed by another a second later. We had no warning and no time to launch the lifeboat, but I pushed a small raft we had on deck into the water and scrambled on to it.

"One of my shipmates told me that the radio operator was blown to pieces. The ship started to go down in four minutes. The crew jumped overboard and were all struggling in the water and we managed to pull several on board, until there were eleven of us there.

"Eventually we were picked up by the lifeboat of a Norwegian steamer which was lying some distance off and whose crew had heard the explosion and saw the ship sinking."

How We Escorted a Merchant Convoy

In the protection of convoys the Royal Air Force Coastal Command co-operates with the Royal Navy as shown in page 533. A typical flight on escort duty is here described by an occupant of one of the aircraft.

OUR flight started from the East Coast. Taking off in a haze of smoke blown over the countryside from factories farther north, we were soon out at sea. Looking back, we saw the land, half obscured by a grey mist like a layer of dirty cotton wool.

In a few minutes we had reached the convoy. The toy-like ships followed steadily in each other's wake, while destroyers zigzagged on each side and ahead. Guarded by sea and air, the convoy was a formidable formation for any U-boat to tackle. Indeed, there could be little doubt that bombs and depth-charges would send a pirate to his account.

The aircraft which we were relieving on escort duty flew alongside us, while the two pilots, who came from the same station and were due for a game of squash together later in the day, waved their arms and grinned. Then the other banked away and dropped astern of us, setting a course for home. The changing of the air guard was complete.

At a height of a few hundred feet, we made a round of the convoy, looking down on grey-painted hulls and funnels, and yellowish-brown decks. From above, the ships seemed hardly to be moving, but splashes of white spray around plunging bows showed that they were really making good headway.

Every ship must keep her station. To leave the formation is to invite danger from mines. We saw a small but fast steamer try to make use of her superior speed and draw ahead. She looked exactly like a motorist trying to cut out of a queue to get into the lead.

The offender was soon spotted by one of the destroyers ahead of the convoy. Turning sharply the warship raced back with a high plume of spray rising from her bows. She signalled the delinquent to move back into line. We, from our position in the "gallery," could follow the whole comedy. We saw the cargo boat's bow wave disappear as she fell back to take her proper place. Soon she was in line again and the destroyer was back at her station. We flew ahead to patrol the route.

Suddenly a light winked intermittently at us from the bridge of one of the destroyers. Our wireless operator, still wearing his headphones, picked up his signalling lamp and pointed it through a window towards the destroyer. Moving his finger on a trigger like that of a pistol, he clicked out an acknowledgement. Again the distant light flashed, following us as we circled the destroyer. The operator wrote the message as he watched the signals. He handed a slip to the pilot. It read: "Am going to let off some practice rounds."

We flew off to a safe distance, and saw the flash of an anti-aircraft gun as the destroyer fired a target shell. A tiny puff of smoke appeared high against the blue sky. A powerful salvo followed. In the aircraft we could hear the boom of the guns above the roar of our engines. In a few seconds the sky was spotted with smoke-puffs, and from our "ringside" seats in the air, we saw a spectacle which made us heartily glad it was not our duty to attack a British warship!

In due course we were on the look-out for the aircraft which was to relieve us. Dead on the minute it arrived. Once again greetings were exchanged, and on this occasion it was our turn to hand over. We waved our arms, banked away, and sped homewards.

In page 533 appeared a sectional diagram of a Short "Sunderland" flying boat on convoy patrol. Here is a photograph from another aircraft of one of these great machines—the largest in the R.A.F.—alighting off the coast. "Sunderlands" were concerned in the famous "Kensington Court" rescue, described in page 156.

Photo. Fox

Cartoonists on Red Aggression

Gulliver's Travails!
By Zec, courtesy of the "Daily Mirror."

Racketeer.
"New York Journal, American."

Honour Among Thieves? (Stalin is said to have asked for German help.)
From the cartoon by Sir Bernard Partridge. By permission of the proprietors of "Punch."

The Sportsman.
"Saginaw News" (U.S.A.).

OUR DIARY OF THE WAR

Thursday, January 4, 1940

Russian air force active in region bordering railway line to Swedish frontier.

Finns isolated a Soviet battalion, part of a force sent to make contact with Russian troops at Suojaervi, north of Lake Ladoga.

Finnish warplanes dropped 3,000,000 pamphlets over Leningrad on January 3, and carried out **bombing raids on Soviet island bases** at Oesel and Dagoe.

R.A.F. made successful reconnaissance flights over north-west Germany, and patrols over seaplane bases in Heligoland Bight.

Goering assumed supreme control of German war industries and all Government departments concerned with economic side of war.

Paris reported that in Lower Vosges enemy detachment of 100 was surprised and machine-gunned by French patrol.

British trawler "Daneden" feared lost with crew of nine.

Reported that British liner "Tuscan Star" had been bombed and machine-gunned by German aeroplane shortly after leaving England. Raider driven off by ship's anti-aircraft guns.

Friday, January 5

Russians reported to be digging themselves in opposite middle of Mannerheim Line.

Soviet warship "Kiroff," damaged by Finnish coastal batteries, towed into port for repairs.

Mr. Hore-Belisha, Minister of War, **resigned from the Government,** and Mr. Oliver Stanley was appointed in his place.

Sir John Reith became Minister of Information in place of Lord Macmillan.

Paris reported intense artillery activity along 125 miles of the Western Front.

Announced that part of the first Indian contingent to join the B.E.F. had reached the British forward zone.

Swedish steamer "Fenris" shelled and sunk by Soviet submarine in Gulf of Bothnia.

Saturday, January 6

Helsinki reported that fighting was continuing near Suomussalmi, and that on the Karelian Isthmus artillery fire had intensified.

Battle on five "fronts" in progress in Salla sector.

Finns said to have **made contact with new Russian division** near frontier north of Kiantajaervi.

Russians lost eight 'planes in raid on Utti, 60 miles north-east of Helsinki.

British trawler "Eta" sunk by mine in North Sea.

British liner "City of Marseilles" struck a mine off east coast of Scotland, but was safely towed into port.

Dutch Government issued formal declaration that Holland would defend her integrity against any attack.

Discussions took place at Venice between Count Ciano and Count Csaky, Foreign Ministers of Italy and Hungary.

Sunday, January 7

Mr. Churchill in France visiting British Forces.

Attempt by Russian ski detachment to outflank Finns in Salla sector was defeated.

Russian 'planes again bombed Turku and also raided town of Kuopie.

Paris reported patrol activity at different points of the front. Artillery action east of the Blies.

British collier "Towneley" mined off South-East Coast.

British ship "Cedrington Court" sunk off South-East Coast.

Monday, January 8

Fight on Karelian Isthmus continued in desultory fashion.

During week-end **Finns won great victory** in "waistline" area. **Russian 44th Division destroyed,** 1,000 prisoners and large quantity of war material captured.

Successes were also reported from farther north, engagements on Salla and Petsamo fronts yielding much valuable booty.

Paris reported patrol activity in region west of Vosges.

New German Army H.Q. said to have been established at Recklingshausen, 10 miles from Dutch frontier.

Reported that British liner "Highland Patriot" was attacked by U-boat on December 29, but beat enemy off with 4-in. gun.

British tanker reached Amsterdam after being attacked by Heinkel bomber in North Sea.

Sir Edmund Ironside and Lord Gort decorated with Grand Cross of Legion of Honour by General Gamelin.

Rationing scheme came into operation, foods affected being sugar, butter, bacon and ham.

Tuesday, January 9

Nazi aeroplanes attacked, with bombs and machine-guns, merchant ships, fishing craft and Trinity House vessel off East Coast. British steamers "Gowrie," "Oakgrove" and "Upminster" sunk; steamer "Northwood" attacked and trawler "Chrystalite" disabled. Danish ships "Ivan Kondrup" and "Feddy" also attacked but reached port.

Union-Castle **liner "Dunbar Castle" sunk by mine** off South-East Coast.

British tanker "British Liberty" sunk.

Dutch steamer "Truida" mined.

British trawler "River Earn" reported sunk by Nazi bomber in North Sea.

Russian communiqué admitted that Red troops had retreated several kilometres east of Suomussalmi.

Soviet aircraft raided six small towns in Finland.

Reported that Leningrad-Murmansk railway had again been cut by patrols.

Announced that out of 5,911 ships—British, Allied and neutral—convoyed by British Navy, only 12 were sunk while in convoy.

First Colonial contingent—from Cyprus—landed in France to join B.E.F.

Creation of a Royal Air Force Command in France announced, with Air-Marshal A. S. Barratt as Commander-in-Chief.

Reported that Italy had made representations to Germany concerning detention in German ports of war supplies sent by Italy to Finland.

Wednesday, January 10

Artillery action and air activity reported from Western Front.

R.A.F. made **bombing raid on German seaplane base of Sylt;** reported that Hindenburg Dam, connecting island with mainland, was damaged.

R.A.F. aircraft had **running fight with Messerschmitts** over North Sea. One enemy fighter destroyed and at least one disabled. One British machine lost.

Helsinki reported battle in progress north-east of Lake Ladoga. In Suomussalmi region **Finns drove Russians back over frontier.**

Russians attacking in Salla sector with fresh troops.

Finns reported that 700 out of 1,000 Soviet bombers ranged on eastern frontier were snowbound and frozen up.

Norwegian steamer "Manx" mined in North Sea.

Sweden passed emergency laws giving Government wide powers in case of war.

He Leaves—But His Work Lives On

WITH dramatic suddenness Mr. Leslie Hore-Belisha resigned his post as Secretary for War on January 5. In the pages of "The War Illustrated" we are not concerned with politics, nor with the reasons, whatever they may be, which led to Mr. Hore-Belisha's resignation. But his great work at the War Office should not pass unrecorded in our pages.

Comparatively young himself, he has seen to it that the young men got their chance, and in particular his selection of Lord Gort for the post of Chief of the Imperial General Staff, from which he proceeded in due course to the command of the British Field Force in France, was recognized as a welcome break with traditional ideas. To the rank and file he gave not only raised pay and improved marriage allowances, but facilities for promotion to commission rank; as he has said, "the star is within every private soldier's reach." History will remember him, too, as the Minister who was in office when Britain introduced conscription for the first time in peacetime, doubled the Territorial Army, and sent to France at the beginning of the war the largest Expeditionary Force which Great Britain has ever put into the field as a complete fighting unit.

Leaving the War Office on January 6 after his resignation, Mr. Hore-Belisha, cheerful as ever, returns the commissionaire's salute.